AN EVALUATION OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

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ABBREVIATIONS

ADB	Asian Development Bank
ANP	Applied Nutrition Program
BARC	Bangladesh Agricultural Research Council
BBS	Bangladesh Bureau of Statistics
BMS	Breast Milk Substitute
BINP	Bangladesh Integrated Nutrition Project
BNNC	Bangladesh National Nutrition Council
BMN	Basic Minimum Needs
DHHS	Department of Health and Human Services
EPA	Environmental Protection Agency
EPI	Expanded Program on Immunization
FAO	Food and Agriculture Organization
FBDG	Food Based Dietary Guidelines
FFE	Food for Education
FFW	Food for Works
FGD	Focus Group Discussion
FNB	Food and Nutrition Board
GDP	Gross Domestic Product
GNP	Gross National Product
GO	Government Organization
HES	Household Expenditure Survey
HHs	Households
HHS	Health and Human Services
HPSP	Health and Population Sector Program
HRD	Human Resource Development
ICDS	Integrated Child Development Services
ICN	International Conference on Nutrition
IDD	Iodine Deficiency Disorders
IEC	Information, Education and Communication

IPHN	Institute of Public Health Nutrition
ISSC	Inter Sectoral Steering Committee
IU	International Unit
LBW	Low Birth Weight
MDM	Mid-Day Meal
MOPH	Ministry of Public Health
NAS	National Academy of Sciences
NBHP	National Better Health Program
NESDP	National Economic and Social Development Plan
NFA	National Food Authority
NFNP	National Food and Nutrition Policy / Plan
NGO	Non Government Organization
NHMRC	National Health and Medical Research Council
NNC	National Nutrition Council
NNC-GB	National Nutrition Council- Governing Board
NNMP	National Nutrition Monitoring Program
NNP	National Nutrition Program
NPAN	National Plan of Action for Nutrition
ORT	Oral Rehydration Therapy
PAP	Poverty Alleviation Plan
PDS	Public Distribution System
PEM	Protein Energy Malnutrition
PFDS	Public Food Distribution System
PFNP	Philippine Food and Nutrition Program
PHC	Primary Health Care
PNG	Papua New Guinea
PPAN	Philippine Plan of Action for Nutrition
RDA	Recommended Dietary Allowances
RETA	Regional Technical Assistance
SAARC	South Asian Association for Regional Cooperation

SD	Standard Deviation
SNP	Special Nutrition Program
STC	Standing Technical Committee
TINP	Tamil Nadu Integrated Nutrition Project
UK	United Kingdom
UN	United Nations
UNICEF	United Nations Children's Fund
US	Unites States
USA	United States of America
USAID	United States Assistance for International Development
USDA	United States Department of Agriculture
USSR	United States of Soviet Republic
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
WB	World Bank
WFP	World Food Program
WHO	World Health Organization
WID	Women in Development

AN EVALUATION OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

ABSTRACT

The developed and developing countries have recognized nutrition as human right and formulated their own national food and nutrition policies. The Government of Bangladesh has approved the national food and nutrition policy to improve the nutritional status and quality of life of the population. The aim of the study was to evaluate the effectiveness of formulation and implementation of the existing national food and nutrition policy of Bangladesh.

The information and data on the food and nutrition policy formulation and implementation process, and progress of policy activities were collected through qualitative approach (observation, in-depth interview and focus group discussions) and literature search. The information were critically reviewed and analyzed. The effectiveness and suitability of formulation and implementation of national food and nutrition policy of Bangladesh was also assessed by qualitative approach followed by the SWOT analysis and using the criteria for effectiveness of policy formulation and implementation, and recommended its improvement.

The food and nutrition policies of three developed (USA, Australia and Norway) and three developing countries (India, Philippines and Thailand) were selected, reviewed analytically and compared with the existing national food and nutrition policy of Bangladesh. Besides, the available data on different indicators relevant to the food and nutrition policy of Bangladesh and selected developed and developing countries have also been compared.

The national food and nutrition policy of Bangladesh was formulated by multisectoral approach like other policies of different countries. Its reflection in plans, programs and projects are encouraging. Some impressive results of nutritional improvements are the success of the policy. The policy has all success elements that are required for formulation and implementation of it effectively and suitably.

The national food and nutrition policy is very important and useful for the country. Bangladesh policy has comparatively good strengths (consensus document

with human rights, formulated by multisectoral approach, complementary to other policies; broader goals and objectives and enabling document) and opportunities (social mobilization of the policy; wider scope; programs and measures to improve nutrition; congenial policy environment; and modification scopes) for its effective and suitable implementation. Not only that the policy has multisectoral ownership. But it has some weaknesses (lack of implementation, monitoring and evaluation guidelines; lack of strong commitment and earmarking of fund; policy-keeper's inadequate leadership, authority and support; ambitious target and policy ignored the lessons learned) and threats (lack of knowledge about the policy; lack of resources for BNNC; lack of trained personnel and management capacity, plans and programs; tension between technical people and bureaucrats; vested interest of business companies; and discontinuity of political will and commitment) as well.

Nutrition policies are different for individual countries, but have a common international goal – to improve the nutritional status and quality of life of the population. Bangladesh policy included a set of broad-based objectives and different sectoral strategies separately; while food and nutrition policies of USA, Australia and Norway documented different strategies against each specific objectives and policies of Philippines and India identified specific objectives and sectoral programs, but Thailand prioritized plans with phased target. The nutrition policies of selected developed countries are concerned with balanced food availability and consumption to make the people free from nutritional disorders, overnutrition and obesity, while the nutrition policies of selected developing countries and Bangladesh are concerned with more production and availability of food to the malnourished people.

Implementation of the national food and nutrition policy would be more effective and suitable by utilizing the opportunities properly, then the weaknesses of its implementation could either be eliminated or be converted into strengths and as a consequence, influence of threats could be minimized.

Key words: Food and nutrition policy, multisectoral approach, and nutritional improvement.

Chapter 1

INTRODUCTION

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INTRODUCTION

1.1 BACKGROUND

The Bangladesh Constitution was adopted and enacted in the Parliament in 1972 after the independence of Bangladesh in 1971. The Constitution has enshrined in article 18 (1) that "the state shall regard the raising level of nutrition and improvement of public health as among its primary duties" (1). As an independent country of the world, Bangladesh has made important commitments not only to the nation but also to the globe for improvement of health and nutrition.

Improvement of nutrition is very essential for the development of any country. In achieving general economic development and in promoting better nutrition, greater emphasis should be given on the relationships between nutrition and the low levels of productivity that are characterized in the less developed countries. Low levels of productivity limit the quantity and quality of food supplies, and inadequate diet often contribute to poor performance by workers in agriculture and industry.

At the present time, many activities are being oriented more toward the prevention of malnutrition and the elimination of under-nutrition. Every effort is made to ensure that food consumption meets the nutritional requirements. This entails increment in quantity and improvement in quality of food produced.

Food is the basic need and human right to keep the population healthy and active. The world food production has been increased substantially over the recent years. Despite significant population growth, per capita food production has also increased significantly. But still the poor or unemployed or under-employed often go hungry within different regions of the world where per capita food production also has been increased. In fact 200 million or more people have starved to death or died of hunger related diseases in the past two decades all over the world (2) and as many as a billion people are chronically undernourished today, about fifty percent seriously (3). While these acute cases gain much public attention, they

constitute only the tip of the iceberg of widespread hunger, mostly in developing countries, the causes of which are more complicated (4).

A number of global meetings held during seventies, eighties and nineties for the improvement of health and nutritional status of the world population. The participant leaders and experts of different countries discussed at length about the problems of malnutrition and their possible solutions. Since the World Food Conference held in 1974, a lot of efforts were taken by different governments of developed and developing countries to ensure adequate food for all, with some success and some failures. Scrimshaw stated after 20 years of the 1974 World Food Congress held in Rome that although the congress sensitized the participant countries to formulate their own food policies, but it has proved to be a rhetorical exercise that did not result in the actions by either developing or industrialized governments that would be required to achieve the proclaimed goals (5).

In 1978, the representatives from 134 countries assembled in Alma Ata and endorsed the goal of "Health for all by the year 2000". By this was meant removing the obstacles to health (6). They proposed a comprehensive strategy focused on prevention. Among the nine elements, seven are totally nutrition-related. These are health education, proper food supply and nutrition, safe water and basic sanitation, maternal and child health care, immunization, and the prevention and control of endemic diseases.

In 1990, UNICEF has initiated a remarkably successful gathering that brought together 71 Presidents and Prime Ministers for the first 'World Summit for Children'. This largest gathering of the heads of state and government in history made a commitment to try to end child deaths and child malnutrition on today's scale by the year 2000 (7). Bangladesh is one of the signatories of the declaration. The strategy to attain the overall goal was divided into more than 20 specific targets in the plan of action that was agreed upon by more than 150 nations represented at the summit. Final declaration states: "We are prepared to make available the resources to meet these commitments". The Presidents, Prime

Ministers and Monarchs who attended the world summit gave prominence to the problems of malnutrition. In the 10-point program they adopted, they state:

"We will work for optimal growth and development in childhood, through measures to eradicate hunger, malnutrition and famine, and thus to relieve millions of children of tragic sufferings in a world that has the means to feed all its citizens."

In a section dedicated specially to food and nutrition, their plan of action states:

"With right policies, appropriate institutional arrangements and political priority, the world is now in a position to feed all the world's children and to overcome the worst form of malnutrition, to halve protein-energy malnutrition, virtually to eliminate vitamin A deficiency and iodine deficiency disorders and to reduce nutritional anemia significantly" (8).

The then UNICEF Chief, Mr. James P. Grant has clearly recalled the commitments made above by the heads of state and informed that "The fight against malnutrition lies at the very core human development, with intimate linkages to the entire array of goals for the 1990's (8)."

In October 1991, WHO and UNICEF in Montreal, Canada convened a Policy Conference on Micronutrients (9), with the participation of other agencies in the UN system and bilateral agencies concerned with nutrition. Delegation from more than 60 developing countries have reported their success of programs and experts reviewed the current global status of micronutrient deficiencies, particularly of vitamin A, iodine and iron. They also reviewed the possible immediate affordable and effective actions need to be taken to eliminate them. More than 300 participants who were attending the meeting have the consensus that the goal can be achieved in the current decade if current resource flows smoothly and leadership are sustained and countries keep the commitment their leaders made in the World Summit.

The World Food Program (WFP) is presently recognizing that its food aid must be integrated into the national development programs and be treated as a

development resource by governments and it should be backed by adequate technical and financial support (5). With limitations WFP has made food aid a short and long-term contribution to preventing hunger.

In December 1992, an International Conference on Nutrition was held in Rome. Although FAO and WHO organized the conference, all other international, bilateral and voluntary agencies were invited to participate. Almost all developing countries were represented at the conference at the highest technical and political levels. The participating ministers and the plenipotentiaries representing 159 states and the European Economic Community at the International Conference on Nutrition declared their determination to eliminate hunger and to reduce all forms of malnutrition. They recognized that access to nutritionally adequate and safe food is a right of each individual, and globally there is enough food for all and that inequitable access is the main problem. They endorsed those, policies and programs must be directed towards those most in need. The priority should be to implement people focused-policies and programs that increase access to and control the resources by the rural and urban poor raise their productive capacity and incomes and strengthen their capacity to care for themselves. They also recognized the importance of the family unit as the basic unit of the society for providing adequate food, nutrition and a proper caring environment to meet the physical, mental, emotional and social needs of children and other vulnerable groups, including the elderly (10).

Bangladesh has participated in these conferences and summits, and gave its commitment to the global forums towards ensuring adequacy of food and improvement of health and nutritional status of the population. The government of Bangladesh has the political will of improving the health and nutritional status of its people. Considering the Constitutional provision of raising the level of nutrition of the people in Bangladesh and the deterioration of nutritional status of the people from 1962-64 to 1974-75, the government established the Bangladesh National Nutrition Council in 1975 with the mandate of formulation of national food and nutrition policy. The Bangladesh National Nutrition Council (BNNC) prepared

three documents on food and nutrition policy in 1982, 1989 and 1993. The first document was 'Nutrition policy and program for Bangladesh' which was approved by the BNNC and published in 1984 (11).

The Standing Technical Committee of BNNC decided that a national food and nutrition policy should be formulated according to the need of the country. Accordingly a draft on national food and nutrition policy was prepared by three experts and presented in a workshop for finalization of the policy in June 1989 (12). The recommendations of the workshop were considered and the draft policy was modified. It was again revised according to the decision of the BNNC. Initially the Standing Technical Committee and Executive Committee of BNNC endorsed the revised policy and then submitted for approval of the council. The national food and nutrition policy has been approved by BNNC in a meeting presided over by the Prime Minister, Government of the People's Republic of Bangladesh. The national food and nutrition policy has finally been approved by the Cabinet (13). The formulation, implementation, monitoring and evaluation of the national food and nutrition policy are a dynamic process. Since nutrition is multisectoral in nature, the policy formulation, implementation, monitoring and evaluation need multisectoral participation.

1.2 NEED STATEMENT AND JUSTIFICATION OF THE STUDY

Malnutrition has been a serious public health problem in Bangladesh. Normal growth, development and resistance to infection are dependent on adequate nutrition. Poor nutrition in early life can effect physical, mental and cognitive development and can reduce both quality of life and life expectancy. All these nutritional problems generally effect the development of the country.

Protein energy malnutrition, particularly stunting, has severe functional consequences, including increased vulnerability to disease and increased mortality risks, lethargy with reduced capability to benefit from stimulation, and reduced learning capacity (14).

Correa et. al. (15) observed that calorie contribution in the rate of growth of national income was 5 percent on the average for developing countries, and concluded that malnutrition may impede the economic growth of poor countries. Leibenstein (16) as far back as in 1957 stated that malnutrition and rural unemployment are closely linked. Behrman concludes that the growing body of evidence shows a significant contribution by nutrition to economic growth and development directly through increased labor productivity, and indirectly through improved cognitive achievement, which ultimately translates into increased labor productivity (17). He also suggested that improving cognitive achievement through nutrition could substantially increase current estimates of the social rate of return from primary schooling of low-income countries.

Nutrition is a psychological need for a human being, physiological and biochemical necessity for a human body and social and economic requirement for a state or government. The governments have certain role in improving the situation of nutrition. They should have initially willingness to improve the lot of their people by making available of resources to meet the basic minimum need. The government needs to formulate public policies and particularly in the field of nutrition, a comprehensive food and nutrition policy.

Nations either rich or poor are increasingly recognizing the importance of a food and nutrition policy. Food and nutrition policy is concerned with the basic nutritional requirements of the population and ensures life-long good health, well being, and productivity. The need of a nutrition policy was emphasized in the 1974 World Food Conference. In a resolution, the World Food Conference expressed its concern about the need for improving nutrition in all countries, and recommended that all governments formulate and integrate concerted food and nutrition plans and policies, this was, at the time, an innovative idea (18).

"A nutrition policy is usually considered as comprising a coherent set of principles, objectives, priorities and decisions adopted by a government and implemented by its institutions as an integral part of its national development plans" (19).

"The multifaceted dimensions of the nutrition problem and how it demanded intersectoral action was not understood by policy makers. The painfully slow process of creating awareness towards comprehensive actions was necessary. But a policy without the requisite level of understanding would be no more than a document. Policy development is itself a gradual process incorporating lessons learned in struggling with solving the problems of malnutrition in the local context" (20).

"A policy is never static. It is continuously shaped by the process that forms it, as it moves from conception to adoption, implementation, evaluation and reformulation. Its beginnings are in the past and its development depends on the attention of those who care about it, despite hostile or indifferent environment. A policy may not so much end as be transformed by the social climate and specific organizational environment with which it evolves" (21).

The persistence of widespread hunger and malnutrition over the world, in spite of increased food production, has led to the view that a broader concept of food and nutrition policy is needed. During 1980's many nations initiated food and nutrition policy activities. Many developed and developing countries have already gathered experience in policy formulation and implementation and also in reformulation. They have identified the problems of implementation of different components of the policy and tried to resolve the problems. Their experience in policy formulation, adoption, implementation, monitoring and evaluation as well as reformulation or updating will be very useful for other countries that are presently formulating or implementing the food and nutrition policies.

Many of the international commitments made it clear that, since the world is ours the responsibility of the maintenance good health and welfare of the people of the world is also ours. Food and nutrition is now considered as human right. It is the right of everybody in the world. Therefore, food-surplus country cannot escape from the responsibility of food and nutrition supply to the food-deficit country. Because the food-surplus developed countries are facing many problems of overnutrition, obesity, and other nutrition related diseases due to adequate consumption of food. On

the other hand, the solution of the problem of undernutrition, infection, and many other diseases due to inadequate food consumption in the food-deficit countries may be possible by supplying adequate foods from food-rich countries. There is scope of attention in food and nutrition of the world leaders of the developed countries to provide assistance to food-poor nations, because "the multisectoral problem of over-nutrition in food-rich countries is tied to the solution of undernutrition in food-poor countries" (21).

The food and nutrition policies on inter-country and intra-country food supply and distribution in times of need to meet the nutritional requirement is necessary for the establishment of human right over the world.

Bangladesh have recently adopted the national food and nutrition policy, which is a milestone in the history of nutrition in this country. Its implementation, monitoring and evaluation need sharing of experiences of other countries that have already formulated and implementing their food and nutrition policies. Although the situation of malnutrition are quite different in different countries and access of the people to adequate nutritious food are also different, the policy making process, participation of the policy-makers, stakeholders authority to implement the policy guidelines are perhaps almost similar.

The national food and nutrition policy of Bangladesh has been approved by the highest authority for the development and welfare of the population of the country. Its formulation process, adoption, implementation, monitoring and evaluation is essential to compare with the national food and nutrition policies of other developed and developing countries. This may help in updating and reformulating the national food and nutrition policy of Bangladesh and making the policy more effective and implementable according to the need of the country. It is very important that an appropriate, affective, suitable and implementable food and nutrition policy is essential for the improvement of nutritional status of the population of every developing country, and particularly for Bangladesh where malnutrition is rampant.

The importance of national food and nutrition policy in influencing our lives, health and prosperity, self-interest alone may have sufficient reasons to study policy issues related to food and nutrition is worthwhile.

This study is conducted to analyze food and nutrition policy processes of the selected three developed and three developing countries, who have already proven their excellence according to the literature available for review, and thus to broaden and sharpen the vision and improve the competency in analysis of policy guidelines. This study also compared the national food and nutrition policy of Bangladesh with the selected six countries' policies and analyze various aspects like formulation process, implementation and progress of the policy guidelines for the nutritional well being of the population. Study findings would help improve the national food and nutrition policy of Bangladesh and other developing countries. The implementation of the recommended policy guidelines of the study would also assist development of plans and programs on nutrition and thus improve the nutritional status of the population.

1.3 OBJECTIVES OF THE STUDY

The objectives of this study were as follows:

i. To review the existing national food and nutrition policy;

ii. To identify the effectiveness and suitability of implementation of the national food and nutrition policy;

iii. To compare the national food and nutrition policy of Bangladesh with food and nutrition policies of selected developed and developing countries; and

iv. To recommend improvement of the national food and nutrition policy of Bangladesh to make it more effective and suitable for implementation.

1.4 LITERATURE REVIEW

1.4.1 Definitions of Food and Nutrition Policy

There are number of definitions of policy, especially the food and nutrition policy. "Public policy means simply a guide to governmental action intended to alter what would otherwise occur. It is the instrument with which modern societies try to shape their futures in ways they consider at least acceptable, if not always desirable" (21). Its formulation is a process, which takes a long course of actions of the concerned policy-makers in the government, stakeholders and beneficiaries.

Policy is defined as a deliberate course of action, as contrasted with a haphazard or capricious type of activity followed by a public body, private firm, family, or individual. Generally it implies wisdom or prudence in managing affairs, based on a definitive plan or program created through a process of thought and reason (22). Different policies are developed, adopted, implemented, monitored and evaluated according to the need of the various countries. The policy is designed on the available scientific information, surveillance data and survey results on the specific areas, such as agriculture, fisheries and livestock, health, education and food.

The policy has been defined in different ways. Like any government policy, the term food and nutrition policy has been defined by various authors differently as:

"A concerted set of actions where the goals of these actions have been agreed upon and sanctioned by authorities" (23).

"An action or set of actions taken by government to modify some aspect of economy or social system in order to attempt to achieve certain objectives" (24).

"A frame work for action, a set rules to be followed when making further choices" (25).

It is also stated that a policy is the manifestation of goals and objectives to achieve a desired result or change. It can be formulated through a variety of processes and may be manifested in many ways (26). Food and nutrition policy

was defined in early 1070's by the two United Nations (UN) agencies, Food and Agricultural Organization (FAO) of the United Nations and the World Health Organization (WHO), as it was within their mandate. The first comprehensive definition of nutrition policy was given by FAO in 1972, that nutrition policy is

"a complex of educational, economic, technical and legislative measures designed to reconcile projected food demand, forecast food supply and nutritional requirements" (27).

Dr. J. M. Bengoa, the then chief of nutrition unit in WHO headquarter in Geneva, stated in the Second Asia Congress on Nutrition in 1973 that -

"a food and nutrition policy can be defined as the formulation of a set of coordinating measures which, when implemented, will ensure the best possible nutrition status for the whole population but focus particularly upon the protection of those groups in which malnutrition is most prevalent" (28).

The food and nutrition policy, which is regarded as an important area in public policy, may be defined as a course of public action directed towards the improvement of the nutritional status of all people living in the society. Broadly, it involves the full range of public decisions that influence the individuals and different sectors to decide what actions are taken to improve the nutritional situations, how these shall be implemented, and who are the targets. The food and nutrition policy guidelines need to be implemented by a number of sectors due to its multidisciplinary nature within a time frame.

The acceptance of the definitions of food and nutrition policy depends largely on the ministerial system and responsibility of individual countries. Malawi, Mozambique and Angola have recognized the necessity for the creation of broader-based planning offices or ministries that exist above the line ministries and address agriculture, food and nutrition issues as a whole. This alternate approach to development stresses the role of the food and agriculture sector as a whole and explicitly incorporates nutrition goals into all areas of development strategy (29).

Although the definitions of the policy are different according to the views of different authors, the policy formulation, implementation, and monitoring and

evaluation process are almost the same in many countries. The policy researchers do agree on the approval of the policy at the highest level with ownership of the stakeholders, so that it could be implemented usefully by them.

1.4.2 Importance of National Food and Nutrition Policy

Nearly half of the world's people are malnourished. Hundreds of millions of people have no access to adequate quality food in the world and many of them suffer from malnutrition. More than 850 million people are estimated not to have access to enough food to meet their basic daily needs, and more than one-third of the world's children is stunted due to diets inadequate in quantity and quality (30). The current situation of the health and nutrition of children in various regions of the world has been briefly reviewed; 31 percent of children under five in developing countries, or 167 million, are undernourished, 38 percent, or 206 million are stunted and 9 percent, or 49 million, are wasted. The global trends in the last twenty years indicate a decreasing prevalence of undernourished children in developing countries except for Africa, where an increasing trend is observed, only the Latin American region seems to be achieving the year 2000 goal of 50 percent decline, in moderate and severe malnutrition (31).

Malnutrition is the greatest enemy of growth and development. It affects human growth and development by adversely affecting the normal shape and size of the body, and in early childhood it can result in serious retardation in mental development. Even the world food crisis of 1972, at least 400 million persons, of whom at least 40 percent were children, were estimated to have an insufficient protein-energy supply (32). During the period 1969-71 the food energy supply in 24 developing countries were more than 10 percent below required levels and in deficit by less than 10 percent in 33 other countries (33). The food insecurity among the developing world population made the biggest crisis to the governments of the food-poor nations. Malnutrition has been identified as the 'biggest single contributor to child mortality in developing countries' (34). The expectation of life in developing countries has improved considerably over the period, but there is

little other evidence that the basic need of the poor is being met to any greater extent. Earlier different development policies were devised with good intentions. The emphasis has been on economic growth without careful examination of who would benefit from it. It was assumed that the beneficial effects of growth would spread throughout the economy. But this has tended not to happen or to happen at a very slow pace (35). Among the basic minimum needs, the fulfillment of the requirement of food and nutrition is very important to incorporate in every country's development policies.

The deficiencies of just vitamin A, iodine and iron could waste as much as 5 percent of gross domestic product, but addressing them comprehensively and sustainably would cost less than 0.3 percent of gross domestic product (GDP). The 1990 Summit for the Children endorsed these three micronutrients' goals for the end of the decade, which were reaffirmed in 1991 at the Ending Hidden Hunger Conference and in 1992 at the International Conference on Nutrition (36). These goals will be achievable only if there is the political will, commitment to the people, a concrete food and nutrition policy and resources to address the problems.

The nutritional well being of a population has been considered as an indicator of national development. This depends on the combined performance of the social, economic, agriculture and health sectors. Nutrition is also recognized as an essential input for national development aims to a healthy, well-nourished and educated population who can accelerate national growth. Development aims to provide all people with the social and economic environment essential for them to be healthy, active and productive.

To achieve this objective the governments need to develop policies and programs towards improving the human development, including improvement of nutritional well being. A policy or program which deals with one determinant of nutrition may be successful but still not show any measurable impact on nutrition or health if other factors continue to impose negative nutritional effects. The changes in food supply, disease pattern and attitudes to food, health and nutrition research illustrates the complex factors that affect nutrition policy in different parts

of the world. The formulation of a national food and nutrition policy involves a number of interest groups represented by various organizations, political parties, and government agencies. National food and nutrition policy needs action based on expected results, as the government acts to solve collectively selected problems experienced by many individuals. Accordingly the food and nutrition policies have been formulated and implemented by both developed and developing countries of the world.

1.4.3 Multisectoral Nutrition Policy

Nutrition is multisectoral, its improvement strategy thus strongly deserves multisectoral approach. Almost every country considers implementation of nutrition programs through multisectoral participation, such as agriculture, food, fisheries and livestock, health, social welfare, human development, industries, education, information and mass communication and rural development.

There is a strong debate among the policy and planning researchers on the necessity of multisectoral nutrition policy or planning. It was a great expectation that multisectoral nutrition planning might have significant contribution towards nutritional improvement in the low-income countries.

"The early 1970s witnessed the emergence of a dramatically new approach to addressing malnutrition in the form multisectoral nutritional planning" (37). "Multisectoral nutrition planning represented an attempt to plan for nutritional improvement as a central component of overall development planning" (38). But according to Professor Field, "It was conceptually elegant and operationally ambitious, blossomed on paper but collapsed in practice" (37). Because of subsequent frustration and disappointments on multisectoral planning, he stated nutrition planning as an ambitious undertaking.

"Multisectoral nutrition planning was conceived as a comprehensive, systematic and cost-effective approach to alleviating malnutrition" (37). Although Professor Field mentioned that "the early proponents of multisectoral nutrition planning clearly defined protein-energy malnutrition as a structural problem

embedded in poverty and underdevelopment, they recognized that multiple changes in socioeconomic conditions would be necessary to alleviate malnutrition and ultimately to eradicate it. They perceived a need to adjust existing government policy and to initiate new policy on a variety of fronts in order to achieve these changes; and they believe it essential to formulate a comprehensive strategy as the basis for mobilizing different agencies of government in a well-coordinated plan of attack" (37). Professor Field also stated that multisectoral nutrition planning was the brain child of technicians- economists and nutritionists especially who took over the issue of malnutrition, exalting their own expertise in the search for the new or more promising solutions (37). He criticized multisectoral nutrition planning in several ways and concluded it as a total failure. He recommended that only the health and agriculture sector alone could improve the nutrition scenario of a country.

While the Senior Nutrition Advisor of the World Bank, Dr. Alan Berg argues that, although nutrition planners may have been overly optimistic in their hopes that political systems could be made responsive to the problems, significant advances have been achieved. He outlines many of the successes of nutrition planning and the importance of multisectoral work. He stated that malnutrition is a problem that escapes all the standard programs, and cannot be tackled through the health and agriculture sector alone (39). He clearly mentioned that there are many things to do to improve nutrition beyond health and agriculture sectors. He differed with Professor Field, who advocates for intrasectoral approach by stating that an intrasectoral approach does not deal forcefully with poverty. Dr. Berg stated the success of multisectoral nutrition approach in Indonesia and Tamil Nadu Integrated Nutrition Project. It is mentioned in the rejoinder of Dr. Berg (39) that today's nutrition world has been heavily influenced by the concepts of multisectoral planning. At or near the top of the list of important work now going on which affects the nutrition of large numbers of people are the multisectoral analyses of the nutrition consequences of economic stabilization and structural adjustment programs (40). And the food security studies that are being undertaken

in a number of countries cut across organization charts just as they cut across discipline (41).

This important historic debate on multisectoral planning between Professor Field and Dr. Berg has created opportunity and enthusiasm among the policy researchers to study the necessity of multisectoral planning or multisectoral approach for nutritional improvement. In this case, the author intended to investigate critically, whether the multisectoral approach really helped in successful formulation and implementation of food and nutrition policy in the country. Because of the fact that the national food and nutrition policy of Bangladesh has been formulated and is being implemented by multisectoral approach, involving all the sectors concerned with nutrition (such as, agriculture, fisheries and livestock, health, food, education, information, women and children affairs, social welfare, commerce, industries, etc.).

Besides, Milio clearly mentioned that public policies for health should be "ecological in perspective, multisectoral in scope, and collaborative in strategy" (42). Her statement is also applicable for food and nutrition policy. The nutrition policy implementation as well as collaboration should be multisectoral. The International Conference on Nutrition (ICN) held in 1992 emphasized to develop plan of actions, which should adopt a multisectoral and multidisciplinary approach in defining coherent and realistic strategy (10). In Brazil pure subsidies and donations proved less effective and demonstrated that while poverty, associated with low nutrition is the chief cause of malnutrition, it needs to be combined with education and health programs for effectiveness (43). Besides, the alleviation of poverty and the strengthening of national health care systems alone cannot solve the problem of micronutrient deficiencies. Because micronutrient content is a hidden property, people do not automatically demand micronutrient-rich foods with increased income. Thus food and agricultural policies need to watch over not only the quantity but also the nutritional quality of the food supply and promote the production, marketing, and consumption of micronutrient-rich foods (36). The

multidisciplinary thinking in nutrition developed as a result of continuous research for a better causal analysis of malnutrition problems.

Improvement in nutrition cannot be achieved in isolation. It is essential to involve different concerned ministries, departments, agencies, organizations and non-government organizations as well as the beneficiaries in food and nutrition policy formulation. The sectors like agriculture, fisheries and livestock; food, health, education, social welfare, rural development, industries, commerce and others, who are concerned directly or indirectly with nutrition. These sectors need to be involved in implementation of the policy, plans and programs for nutritional improvements. Policy implementation depends on sharing of responsibilities of different sectors. Since nutrition is everybody's business and nobody's responsibility, involvement of different sectors is not so easy.

1.4.4 The Process of Making Food and Nutrition Policy

The policy-making process involves the concept of ***incrementalism***, the new decision added to the old. Policy is built, step by step or decision by decision. Both the wise decisions of the past, as well as the mistakes, is the foundation for current and future action, or policy (22). The government involving experts, individuals, groups or organizations with a political objective or goal generally formulates the food and nutrition policy. In the United States, a number of individuals and interest groups are involved in policy-making and hence, involves innumerable compromises by many individuals, and political interest groups, represented by various organizations, political parties, and government agencies. The policy-making process differs from country to country. But still there are some common events happened in almost all policy formulation processes. The experiences of policy process of developed and developing countries are sometimes similar. In a democracy, a number of steps are required to formulate a public policy like food and nutrition policy.

"First, the process generally starts with a feeling that a change in the current state of affairs is desired. This may be a feeling of hurt or dissatisfaction, or dissent

from what is being done or not done. Second, there must be development of public awareness that something should be and can be done. Third, there must be public acceptance of some proposed policy or policies, and associated political action to get one or another of these policies adopted. Fourth, there is evaluation and analysis or review, which may take place at any stage in the process of making policy, or as an additional step in reappraisal of policy" (22).

The policy of feeding population is an old crisis that presents its challenge a new in every era. In the late twentieth century, the challenge once again is that of providing food for all amidst of crisis of energy, population growth, and pollution. Henry IV of France pursued a social policy, which had as its stated objective that "there is no laborer in his kingdom so poor that he could not have boiled fowl for his Sunday meal." More modern politicians have made similar pronouncements, but in different term's (44).

In 1923, the League of Nations Committee on the Relations of Nutrition to Health, Agriculture, and Economic Policy reported that "the ultimate responsibility of the nutrition and health policy of a nation must rest with that nation's government." Joseph Goldberg came to the same basic conclusion while studying pellagra in the American South as a member of a government commission. So, both by tradition and the reports of the commissions, the responsibility for nutrition is placed squarely on the shoulders of the government (45). A policy is made up of first, the goals or objectives; secondly, the rationale for the objectives and lastly, the method of achieving them.

Initially a policy-making climate needs to be created by the experts of food and nutrition. If the policy-makers convinced about the importance of the problem of malnutrition and its consequences on the national development and the political will works with the public benefits, then policy-making become easier. The key players in nutrition policy processes are different sectors of the government, policy-keeper and the stakeholders. The participation of the stakeholders in policy-making process encourages them to be responsible for implementation, monitoring, evaluation and reformulation of the policy as they have own it.

Nutrition policy involves consideration of health on a broad basis taking into account the entire social, political, and economic fabric of the community, the availability of solid scientific evidence, and the need for modification as condition change and the new information is obtained (46).

Hayes (47) stated that the elements of policy formulation process are generally categorized into the following:

- Research, including knowledge-building, problem exploring, policy-forming, and program-directing studies that are introduced into the policy process to support or refute the position of program proponents and/or opponents.
- Contextual factors, including those social, economic, demographic, political, and ideological factors that shape the overall context of federal decision-making at any given point in time.
- Constituency activities, including direct and indirect pressure, exerted by both organized and unorganized constituencies outside the federal Government.
- Actors and institutions, include those that participate directly in the federal decision-making process in the legislature, executive, and judicial branches of government.
- Principles and ideas shape participants' vision or policy goal.
- Media presentations, including television, radio, and the popular print media such as newspapers and magazines.

In view of the important role which improved food consumption and nutrition has to play in overall economic development, the government should adopt measures directly designed to assist such improvement. The nutritionists, agriculturists, economists, food scientists and others have to work together for such development by formulating the national food and nutrition policy. The food and nutrition policy formulation may be done considering the following four stages:

- Identification of the main nutrition problems from the appraisal of the current food and nutrition situation;

- Appraisal of the nutritional implications of any agricultural development plans within the context of economic and social development plans;
- Indicating of desirable trends in food consumption, in the short, medium and long term;
- Formulating a food and nutrition policy, and the programs and other means to put such policy into effect (48).

The policy-making requires some important groups within and outside the Government. These groups include a "policy-keeper", a strategic body that either de facto or by formal designation has responsibility for moving a policy through one or more of its developmental phases, a body that is a target of and a contender among other stakeholders. The effectiveness of these stakeholder groups depends on their authority, status, resources, and skillfulness relative to competing group's (21). In Norway, Philippines and some other developing countries like Bangladesh, the National Nutrition Councils are playing the role of policy keepers. But most of these Councils do not have enough authority, status, resources and sometimes, inadequate expertise to suitably formulate, execute or implement, monitor and evaluate the policy guidelines.

1.4.5 Conflicts and Compromises in Policy Formulation

A debate has concerned what constitutes food policy and what nutrition policy. Food policy has been defined as more comprehensive in seeking to address the food system as a whole from food production through to marketing and consumption. It is based on assumption that these are all closely linked and need to be addressed together. Nutrition policy, on the other hand, has a limited concern with the direct increase of food consumption (29). It may be even more narrowly defined by integrating it into a large comprehensive policy of disease prevention and health promotion (23) thus limiting nutrition concerns to the health sector.

Policy compromises are reached through the political process, even though the major goals remain essentially in conflict (22). The conflicts are sometimes

found between the government and the interest groups; bureaucrats and technical experts or nutritionists; producers and general public or the consumers.

The leadership conflicts between sectors were also found in policy making, e.g. in Norway the conflict between the health and agriculture sector was observed in nutrition policy formulation and adoption (21). The same thing happened in Bangladesh, although the government decided that the lead ministry for nutrition would be the ministry of health and family welfare. The ministry of agriculture (as in Philippines) sometimes claims to become the lead ministry for nutrition in Bangladesh, since they are responsible for production, storage and supply of food to the population (49). There are also conflicts between the bureaucrats and the technical experts, such as nutritionists; but the issue is different. The bureaucrats prefer management and financial aspects in the policy and generally they don't want to go in depth of the other implications of the policy, while the technical experts prefer the technical issues which need to be covered in the policy. The general public or the consumers want nutritious foods at reasonable cost, which means, over time, with economic progress or growth, real prices will decrease. On the other hand, the agricultural producers generally want what may be called fair prices, and the equality of opportunity to share in the fruits of national economic growth with publicly supported measures to educate, train, and assist them to be productive. They don't want to pay more than their fair share for other services like schools, roads, hospitals etc.

More importantly, all these conflicts are compromised through frequent discussions and close contacts between the parties or interest groups in decision making on the policy. The government and the policy keeper have an important role to play in resolving the crisis or issues.

1.4.6 Elements of Successful Food and Nutrition Policy

Policy involves planning based on certain beliefs, values and goals, taking into account the resources that may be available for reaching the goals, and the benefits and costs of using one plan or another. The ***elements*** of policy involve the

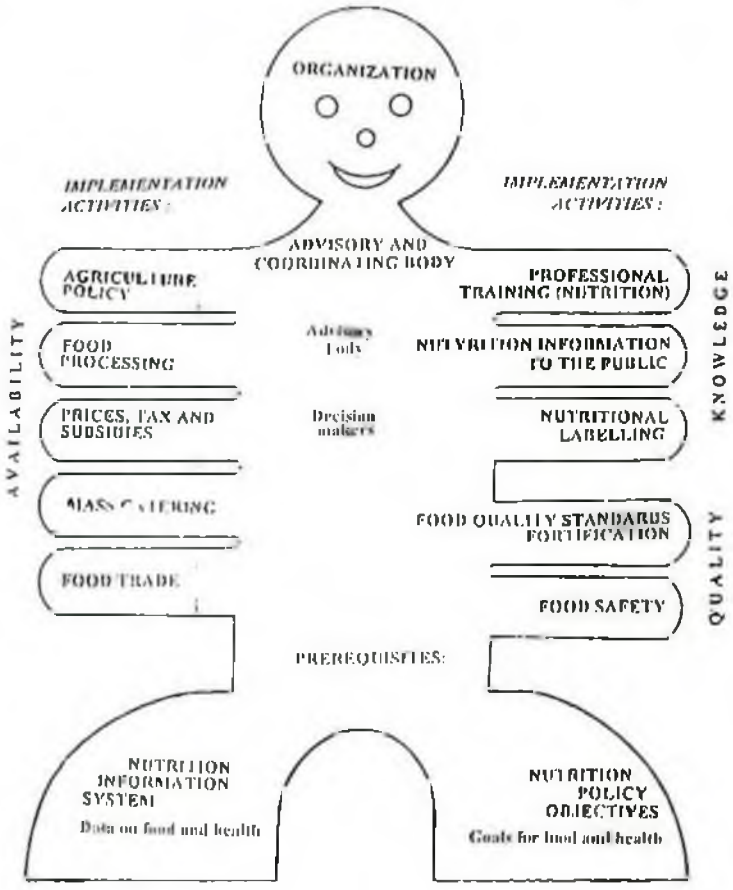
goals that may be established, the ***means*** that may be used to reach the goals, the ***implements*** such as agents or agencies that activate or control the means, and the ***constraints*** that are applied to the plan or program. The basic concept of policy is that of deliberate action or activity involving these four elements (22).

"Policy formulation evolves over time and cannot be attributed to a simple or single event. It involves a large number of decision points involving epidemiologically derived data, scientific testimony, special interest lobbing, a senate vote, a presidential impoundment or an appellate court ruling" (50). A number of elements are required for the food and nutrition policy. Helsing pointed out that due to the inter-related nature of the various sectors, these elements might be presented in a comprehensive framework of holistic homunculus of nutrition policy (51). The objective of the policy and the data available from the information system are the symbolic ***feet*** upon which they are based and constitute the basis of the policy. The activities are the symbolic ***arms*** through which the objectives can be attained. The allocation of responsibilities for initiation and coordination of activities, for professional advice on nutrition and for making decisions are illustrated by the ***head*** - and the ***guts*** of the humanoid policy body (Figure- 1.1).

In the food and nutrition policy-making process the involvement of various sectors is important, particularly those who are concerned with food and nutrition as well as the beneficiaries and the communities. Integration of decisions, thoughts and ideas of the political leaders, ministers, senior bureaucrats, field level workers and the people for whom the policy is meant for is necessary (52).

The successful food and nutrition policies are built on recognition of common interest among the stakeholders, which may change over time, have an implementing strategy, and policy keeping (oversight and advocacy) as essential components.

Figure-1.1: An Organizing Framework for Nutrition Policy-making: The Holistic Homonculus.



The common interests of the stakeholders need to be prioritized first for making a good environment of policy-making and then only it would be possible to include other individual sector interest into the policy document.

1.4.7 Global Activities on Food and Nutrition Policy

The global activities on nutrition began in a few developed countries in early 1930s. In 1924, the declaration of the rights of the child was made in Geneva to extend particular care to the child. The UN General Assembly adopted the declaration of the rights of the child on 20 November 1959, while the Assembly adopted the Convention on the Rights of the Child on 20 November 1989, i.e. after 30 years.

The formulation of national food and nutrition policy got its momentum in the early 1970s, when the global food problem worsened. Most of the food-rich as

well as food-poor countries are being compelled to reassess and revise their policies on health, food and nutrition, agriculture, fisheries, trade and aid (21).

Among the developed countries, Norway is the pioneer in formulating and implementing the food and nutrition policy. The food and nutrition policy of the United States of America, Japan, Australia, New Zealand, and United Kingdom have contributed significantly to the welfare of people and are well recognized by the policy researchers. While food and nutrition policies in the developing countries, such as, Thailand, Tanzania, Philippines, Indonesia, India, and Malaysia are well known successful policies, which are contributing to the improvement of the nutritional status of the population. The global food and nutrition policy and related activities are shown in Table 1.1 below.

Table-1.1: Global Policy Activities

Year	Food and Nutrition Policy and Related Activities	Place
1930s	Nutrition policy and programs for healthy lifestyles	Developed countries
1974	World Food Conference (Declaration on the formulation of NFNP in every country)	Rome
1974	Nutrition Act in Philippines	Manila
1975	Norwegian nutrition and food policy (Revised in 1981)	Norway
1978	Papua New Guinea food and nutrition policy (Reformulated in 1992)	Papua New Guinea
1978	Declaration of Alma-Ata on Health for All by the year 2000 (PHC)	Alma-Ata, USSR
1980	National food and nutrition policy of Thailand	Thailand
1984	Nutrition policy and programs of Bangladesh	Bangladesh
1986	Vanuatu food and nutrition policy	Vanuatu
1987	Food and nutrition policy of Philippines	Manila
1989	Convention on the Rights of the Child	UN Assembly
1990	World Conference on Education for All	Jomtien
1992	National Food and Nutrition Policy of New Zealand	New Zealand
1992	Australian Food and Nutrition Policy	Canberra
1992	The Food and Nutrition Policy for Tanzania	Tanzania
1993	National Food and Nutrition Policy for Western Samoa	Samoa
1993	National Nutrition Policy of India	India
1995	Farm Bill (Food and Nutrition Policy) of USA	New York
1997	National Food and Nutrition Policy of Bangladesh	Bangladesh

Most of the countries have experienced that the policy formulation is a lengthy process and its implementation is also difficult as well. The nutrition

policy implementation and measuring the progress also require a number of nutrition indicators. The nutrition indicators are commonly used to measure the progress of development programs and projects. Planners and policy makers to establish baseline values, to focus attention on the problems of nutrition, and to identify development projects for nutritionally at risk groups of the population use the nutrition indicators (53).

There is increasing evidence that diseases of major public health importance are causally related to nutritional imbalance. Development of nutrition policy to improve the nutritional status of a population requires reliable information about food consumption and its impact on the health of the population (54). A combination of different methods provides more reliable information than the use of a single method for the dietary assessment to measure the nutritional status of representative samples of the general population.

The formulation, updating, implementation, monitoring as well as evaluation of the food and nutrition policies depend on the political will and commitment of the government of the respective countries. The changes of political parties in the government also make changes in the policies according to their priorities and importance. Some governments provide great importance on the improvement of nutrition of the people and allocate a good amount of budget for it, while others have interest on the arm race and cut down the budget for nutrition. The national food and nutrition policies of developed and developing countries are different because of their different perspectives. The food-rich developed countries have the problems of over-nutrition, while the food-poor developing countries have the problems of under-nutrition in the community. These countries are ready to finance supportive public health education, a few community-based projects, and a variety of strategic machinery to draw attention to nutrition policy development. The major policy issues of these countries are the goals and scope of policy, particularly reduction of animal fat in diet.

In 1980s, there were overproduction of major crops in many regions and increasing competitions for world markets. The European Community (EC) and

the United States had taken costly governmental pricing policies and agricultural technology and a growing emphasis on self-sufficiency in many nations, which were the main reasons for worldwide surpluses. But at that time the food-poor countries do not have sufficient resources to import food. The situation compelled the food-rich countries to change the fundamental policies. In these countries, actual changes were nonetheless only modification of older policies by 1987. Most of the countries continued to subsidize a major share of farm income, ranging from 20 percent (Australia) to 80 percent (Japan); the European Community and the United States fell down these limits at 48 percent and 40 percent (55). The food and nutrition policy for New Zealand (56) was formulated and adopted by the government. The task force members consisted of different disciplines reviewed the Norwegian and the Australian food and nutrition policies and followed the same process during formulation of the policy for New Zealand.

In the last half of the 1970s nutrition emerged from a relatively minor role in the department of health to take a prominent position in national planning in Papua New Guinea (57). A nutrition planner was appointed to the national planning office in 1977 and an inter-departmental committee was formed to define the problems and formulate policies for the related areas of nutrition and food production. This committee has formulated a national food and nutrition policy, which was, approved by Cabinet in February 1978 (58). The targets of this policy were: (i) to increase marketed domestic food production in order to hold the volume of food imports constant; (ii) to maintain the level of subsistence production per person of the rural population; and (iii) to increase food consumption per person to at least 90% of recommended energy requirements (from an estimated level of 80%) such that the level of malnutrition declines significantly (59). It also stated the need for action to alleviate the factors leading to malnutrition. Since 1978 rapid changes occurred in rural sector and the role of provincial governments increased. In order to address current problems more effectively, the Inter-Departmental Food and Nutrition Committee reformulated the policies by organizing a National Nutrition Policy Workshop on 17-21

February 1992. The National Nutrition Policy goals and strategies are intended to replace the 1978 National Food and Nutrition Policy. The primary objective of the policy is to reduce, and eventually eliminate, the nutritional problems of protein-energy malnutrition, nutritional anemia, non-communicable diseases, and iodine deficiency disorders. They are based on a thorough review of the nutritional problems and the issues that need to be addressed to reduce the burden of malnutrition (60).

The Vanuatu National Food and Nutrition Committee consisting of representatives from various departments and NGOs formulated the national food and nutrition policy according to the recommendations of a workshop held in 1983. This was approved by the Council of Ministers in October 1986. There are some similarities in the specific targets of Papua New Guinea (PNG) and Vanuatu's policies. But the policy of PNG did not mention clearly about the reduction of prevalence of nutrition related disorders, while it is one of the specific objectives of Vanuatu's policy.

The food and nutrition policy for Tanzania (61) was formulated by the Ministry of Health in collaboration with other various institutions and the public in general and presented to the ruling party (Chama Cha Mapinduzi) and Government with the aim of improving and maintaining good public health and nutrition. The development of this policy as well as its endorsement is a milestone in the implementation of the ruling Party's (CCM) fifteen years program 1987-2002 on raising the standard of living of every Tanzanian. This policy is also multisectoral and implementation of the policy demands multisectoral involvement with compliance of specific responsibilities as outlined in the policy document. The national food and nutrition expert committee with the representation of different concerned ministries will implement the policy through plans and programs. Roles of ruling party in implementation of the policy have also been defined in the document.

National nutrition policy and planning is an essential part of nutritional development. But China, Sri Lanka, and the few other countries showing

improvement accomplished it without explicit nutrition planning, multisectoral or otherwise. Nutrition policy planning is both an intellectual and a political process. These works are done either in the national planning offices like Colombia's National Planning Department, or in autonomous multisectoral nutrition agencies like the National Food and Nutrition Institute in Brazil and the Tanzania Food and Nutrition Center. There is no existing national nutrition policy in Greece (62). This is also the case in all other European Mediterranean countries apart from Malta (63). The general explanation for this situation is that nutrition does not receive due attention from the concerned sectors, although in recent years dietary guidelines and other nutritional issues are getting momentum. Referring to the food-based dietary guidelines for the Greek, Moschandreas concluded that the older generation Greeks have a diet more conducive to good health than the younger Greek adults do and thus the development of comprehensive, structured nutrition policy is vital for the survival of the traditional Mediterranean-Cretan dietary patterns (62).

Political commitments play an important role in formulation of food and nutrition policy. Major commitment to nutrition improvement in Colombia was possible due to nutrition group's recognition of and response to incoming President Lopez's desire of a dramatic initiative in 1974 (64). Substantial Philippine efforts in nutrition stemmed from the interest of the President's wife, encouraged by the leaders of the national nutrition community (65). Considering the problem of malnutrition as one of the major impediments to national development, the then President of the People's Republic of Bangladesh, Bangabandhu Sheikh Mujibur Rahman constituted the National Nutrition Council with the responsibility of formulation of the national nutrition policy and programs (66). The success of the Expanded Program on Immunization in Bangladesh was possible because of the commitment of the then President, Major General (Retired) H. M. Ershad for universal child immunization in the United Nations General Assembly's 40th anniversary session in 1985 and the collaborative participation of different sectors. Bangladesh started with only two percent immunization coverage in 1985 and

reached around 70 percent by 1990 (67). This was claimed as near miracle in Bangladesh.

Gopalan stated that the solution of nutritional problems must obviously lie in ensuring that habitual diets in households are nutritionally adequate. The national nutrition policies must largely be food based rather than drug based (68). He also said that the recent advances in food and nutrition science have served to reinforce this conclusion. Household food security should be achieved through food production policies at the national level must be informed and regulated by nutritional rather than commercial (export oriented) consideration, so as to ensure adequate balance production of foods needed to meet the nutritional needs of households.

The implementation of the policy through different sectors concerned with nutrition and the monitoring and coordination of policy activities are quite difficult, but essential. Involvement of the community, through their participation in policy activities is important. Tontisirin and Bhattarcharjee (69) stated that community based programs can be effective only if they offer scope of community participation which is to be facilitated by effective policy implementation. They added that nutrition improvement must necessarily tap the potential synergies with other policy goals, within and outside health sector. Establishment of community financing, which is vital to the developmental approach in community based programs, can take the form of village revolving funds, credit cooperatives or other types of collective financing schemes with inputs from the community, but strongly supported by the government. Policy making should necessarily be more bottom-up than it has been, with grater emphasis on the successful learning experiences of the community, catalyzed wherever required, by top-down solutions. The synthesis of national level policies with such community- based programming will help to optimize the potential of human, organizational and financial resources, towards effective control of malnutrition (69).

The government policies have a great bearing on the daily lives of citizens. The policy formulation process must be open to as much participation as possible

to ensure support from various political and economic groups throughout the implementation phase (70). The policy-makers must take considerable effort to protect the interests of the rural poor and undernourished, because of their less access to economic and political power. The policy needs feedback and readjustment, and also reward to the officials who seek to meet policy and program targets whatever their political acceptability for its better implementation.

Decisions about nutrition activity often need approval of different offices that are unfamiliar with or unimpressed by nutrition concern. This creates a lot of problem in implementation of policy, plans and programs concerned with nutrition. Whereas, the decisions at right time on right issues from the right places are very important to make positive changes. The political commitment and the implementation of actions to meet the commitment are the crying need of the time. Therefore, formulation of national food and nutrition policy, its proper implementation and to measure or monitor the progress of actions or activities and reformulation or updating the policy according to the need of the individual country are essential.

1.5 PLAN OF PRESENTATION OF THE STUDY

This study is presented in eight chapters, usually beginning with the background, justification and objectives of the study in the chapter 1. Literature review, particularly, definitions of food and nutrition policy, importance of food and nutrition policy, policy making process, conflicts and compromises, elements of successful food and nutrition policy, global food and nutrition policy activities have been included in this chapter.

The study setting is presented in the chapter 2, which included the general overview, nutrition situation, food habit and dietary pattern in Bangladesh; food security, disease control and caring practices, role of disasters, food aid, role of stakeholders in policy process, and food programs in Bangladesh. The latest information/ data that are available from different studies and used during formulation of the policy in the country have been cited in this chapter.

Chapter 3 is the representation of the methodology of the study. Study design, selection of countries with successful food and nutrition policy, data collection and analysis procedures, and the limitations of the study have been described in the chapter.

Chapter 4 is organized as the analytical review of the national food and nutrition policy of Bangladesh. The review included the formulation process, implementation status and progress achieved on the guidelines of the national food and nutrition policy of Bangladesh with detailed information on the processes described that were collected during in-depth interview and focus group discussions. The major sectoral performances (particularly what has been done, and has not been done, by each of the sectors) on the implementation of policy guidelines have also been described.

The information on the effectiveness and suitability of implementation of the national food and nutrition policy of Bangladesh are collected, critically analyzed and described in chapter 5. The primary information collected from the Key Informants by in-depth interview and focus group discussions on various issues about the effectiveness and suitability including strengths, weaknesses, opportunities and possible threats of the policy formulation and implementation in the country have been discussed. The results obtained on the effectiveness of the policy by using, the SWOT analysis model, and the criteria of 'success' elements in policy development and implementation (section 1.4.6) have also been discussed.

The formulation process, implementation status and policy progress of six selected national food and nutrition policies of developed countries (United States of America, Australia and Norway) and developing countries (India, Philippines and Thailand) have been analytically reviewed and described in Chapter 6.

In chapter 7, the national food and nutrition policies of the selected developed and developing countries have been compared separately with that of the national food and nutrition policy of Bangladesh.

Finally, the conclusions and recommendations have been made in chapter 8, depending on the findings, results and the analyses of the study.

Chapter 2

STUDY SETTING

CHAPTER 2

STUDY SETTING

2.1 GENERAL OVERVIEW OF BANGLADESH

Bangladesh became as an independent nation in 1971 through a liberation war. It has lot of opportunities to become prosperous and productive and also has scope to be one of the best countries in the globe with plenty of resources.

2.1.1 Geography, Demography, Agriculture and People in Bangladesh

Bangladesh, a small but beautiful country of the world, has 144 thousand square kilometer area. There are three big rivers: Padma flowing from the west, the Jamuna flowing from the north and the Meghna flowing from the northeast from this huge delta. The country has three ecological zones: the plain zone, the flood-prone zone and the hilly zone. The land has a common border with India of 3715 km in the west, north and the east, a small border of 280 km with Mayanmar in the southeast, and the Bay of Bengal in the south. The coastal length along the Bay of Bengal is about 732 km (71). Bangladesh is one of the monsoon lands in Asia. The yearly rainfall in this country ranges from 1400 to 5000 mm. The climate allows tropical and subtropical crops to grow throughout the year and temperate crops in winter months. A total of 30 agro-ecological zones and 88 sub-zones have been delineated in the country (72).

The agricultural lands covers about 75% of the total land area (13017 ha) and about 66% of the total population depends on agriculture directly or indirectly for earning their livelihood. Agricultural sector continues to play a very important role in the economy of Bangladesh. It contributes to the national economy to about 35 percent of the gross domestic product (GDP) and 62 percent of the total domestic employment. Sixty percent of the export earnings of the country are obtained through this sector.

There are 6 administrative divisions, 64 districts, 490 thanas, and 4451 unions, about 68000 villages and about 20 million households in the country.

Dramatic changes have been observed among the population and demographic characteristics over the last few decades in Bangladesh. The population in the area, which is now Bangladesh, was about 42 million in 1941. The population increased very rapidly to 76 million in 1974, 90 million in 1981, 111.4 million in 1991 and 122.8 in 1996 (73). The total population in Bangladesh is projected to rise to 150 million by 2010. Although the population growth rate has been reduced from 2.6 in 1970 to 1.72 in 1996, the population is more densely settled in this country than in any other country. The population density is one of the highest in the world. Besides, the life expectancy rose from 45 in 1970 to 59.5 in 1996 (74). This has changed the structure of population age group. Among the population about 57.3 million are males and 54.1 million are females and the male/female ratio is 106 for the country as a whole. Under 5 year olds constitute 13.5% (11.7% in urban and 13.7% in rural) while children aged 5-9 years constitute 15.3% (13.1% in urban and 15.6% in rural) of the total population (71). Literacy and education are considered as an important precondition to social development. The adult literacy rate has been increased from 25.8 percent in 1974 to 45.6 percent in 1996. The literacy rate is quite unsatisfactory. Recently, the government has not only made primary education compulsory but also has given a big push to the development of primary and mass education. Besides, the non-government organizations are boosting up the non-formal education throughout the country. The socio-economic information of Bangladesh available in 1998 from different sources is presented in Table 2.1. In 1998, the Progotir Pathey (75) stated that the population, land mass and population density in Bangladesh was 14.3 million, 147570 square kilometer, and 826 per square kilometer respectively. About 22 percent of the total population live in urban areas of the country, while 78 percent live in rural Bangladesh (76). The Household Expenditure Survey in 1995-96 (77) showed that 47.5 percent of the population live in below poverty line and 47.0 percent are landless peasants having less than 0.5 acres of land. The per capita income of Bangladesh people was Taka 12240 only (78). The rate of unemployment among the people above 10 years of age was 55.2 percent, in which

the rate of male unemployment was 45.7 percent and of female was 65.1 percent (Table 2.1) (78).

Table-2.1: Socio-economic Information of Bangladesh

Items of Information/ Data	Quantity	Information Source
Population	124.3 Million	Progotir Pathey, 1998, p. 8
Land mass	147,570 sq. km.	Progotir Pathey, 1998, p. 8
Population density	826 per. Sq. km.	Progotir Pathey, 1998, p. 8
Rural population	78.34%	WID data sheet '98
Urban population	21.7%	WID data sheet '98
Population below poverty line	47.51%	HES-1995-96, 1998. BBS, p. 54.
Landless peasants (Below 0.5 acre)	47.0%	HES-1995-96, 1998. BBS, p. 68.
Per capita income	Tk. 12240 US $ 247.24 (1$ = Tk. 49.50)	Statistical Pocket Book '98, p. 6.
Unemployment (Age: 10 yrs. and above)	Total : 55.2% Male : 45.7 %; Female : 65.1%	Statistical Pocket Book '98, p. 170.
Literacy rate	Both: 51.2% (15^+years) 47.3 % (7^+ years)	WID data sheet '98
	Male: 59.4% (15^+years); 50.6 % (7^+ years)	
	Female: 42.2% (15^+ year); 41.5% (7^+ years)	
Life expectancy at birth	Both: 59.1 yrs. Male: 59.2 yrs. Female: 58.7 yrs.	WID data sheet '98

The Women in development data sheet published in 1998 showed that the infant mortality rate has been reduced to 66 per 1000 live births, under-five mortality rate to 112 per 1000 live births and maternal mortality rate to 4.4 per 1000 live births (76). However, the information presented in the table may differ with other data sources because of many reasons, e. g., sample size, sampling design, method of data collection, etc. of the individual survey.

2.1.2 Resources and Economy

This country has three important resources: a large labor force, fertile land and enormous water resources. It has forest, natural gas, coal, oil and other mineral resources. Although there is promising reserves of coal and oil, coal mining has not yet been started and only a small quantity of oil (about 1800 barrels a day) is currently being produced (71).

A positive trend in economic growth has been observed during the past few years. The per capita gross domestic product (GDP) has increased from Taka 6472 (US$ 161) in 1990 to Taka 10789 (US$ 225) in 1995-96 (provisional) at the market price.

The level of investment in the economy of Bangladesh has stayed low compared to that in many developing countries. The rate of aggregate investment in financial year 1990-91 was 11.5 percent, which rose to 16.63 percent in financial year 1994-95. This was well above the plan target of 14.4 percent. This rising trend has been a positive development in resource mobilization for faster economic growth and socioeconomic upliftment (74).

Labor force participation rates of females have increased from 4.1 percent in 1974 to 18.2 percent in 1996. Life expectancy of females is hardly any different from males. Access to credit and employment of women is on rise. Women are increasingly entering into industrial employment. Ninety percent of the workers in the garment industries are presently female.

The major share of household income (over 85%) in the majority of the households in Bangladesh is spent on food items, indicating very little opportunity to spend on other basic needs of life (i. e., health, education, housing, etc.). The highest is on cereals, while the lowest are on pulses, milk and fruits. But a gradual increasing trend in household expenditure has been observed on meat, fish and vegetables with concomitant reduction on cereals. Expenditure on edible oil is declining which is undesirable given the prevalence of calorie deficiency in Bangladesh (71). This data indicates that while the income raises among the

population they spent more money to buy comparatively costly foods like meat, fish and vegetables.

Not only that when income raises there is a tendency of the people to deposit money in the Bank with a view to use those for land purchase or maintenance/construction of houses. Therefore, creation of awareness on nutrition through information, education and communication is important. These issues have been considered during the development of the national food and nutrition policy and policy guidelines have been formulated accordingly. A broad strategy of the sectoral guidelines on nutrition education and communication has been endorsed for creation of awareness at different levels with formal and non-formal education.

In spite of many efforts and some improvements, poverty persists at an alarming level in the country. Poverty level is described in two different ways -in terms of income* and also in terms of energy intake**. About 45-50 percent of the population lives in absolute poverty (energy intake<2122 Kcal/person/day) and 20-25 percent lives in hard core poverty (energy intake <1805 Kcal/person/day) (71).

The recent survey of the Planning Commission also showed that 60.9 percent of the urban population lives below the absolute poverty line (income <Tk. 3500 per month) and 40.2 percent lives below hard core poverty line (income <Tk. 2500 per month). In Dhaka, the figures are 55 percent and 32 percent respectively (71). The reduction of poverty in terms of energy intake has been duly considered during the development of food and nutrition policy guidelines in the country. Besides, undertaking of all possible measures to increase income-generating activities for poverty alleviation particularly for women in rural households has been considered as one of the objectives of the policy in Bangladesh.

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* A benchmark of the poverty situation in rural Bangladesh was worked out in 1977 classifying **absolutely poor** as those who could not take more than 90 percent of the recommended calorie intake and **extremely poor** as those who could not take more than 80 percent of the requirement (A. R. Khan, 1977). **Absolute poverty** is defined at daily intake of 2122 Kcal per person and **extreme/hard core poverty** is defined at daily consumption of 1805 Kcal per person.

** Poverty is generally measured by the percentage of population having incomes below the minimum expenditure required for meeting the basic needs. In terms of income, **absolute poverty** is defined at the income level below Tk. 3500 per month and **hard core poverty** is defined at the income level below Tk. 2500 per month in Bangladesh (BIDS).

2.2 SOURCES OF NUTRITION DATA

Nutrition information and data are available from different useful sources in Bangladesh. There are number of institutions and agencies, which provide nutrition information/data in the country. The sources include: Bangladesh Bureau of Statistics (BBS), Ministry of Planning; Bangladesh National Nutrition Council (BNNC); Bangladesh Agricultural Research Council (BARC); Bangladesh Medical research Council (BMRC); Institute of Public Health Nutrition (IPHN); Institute of Nutrition and Food Science (INFS), University of Dhaka; Helen Keller International (HKI); National Institute of Population Research and Training (NIPORT); Bangladesh Institute of Development Studies (BIDS); Institute of Child and Mother Health (ICMH); Institute of Food Science and Technology (IFST); International Centre for Diarrhoeal Disease and Research, Bangladesh (ICDDR'B); Women in Development (WID), World Bank, UNICEF, WHO, FAO, IFPRI etc. These institutions/ organizations/ agencies conduct survey, surveillance or research on various aspects of nutrition and provide data and information for national use in the country.

The BBS of the Ministry of Planning has been conducting child nutrition survey, household expenditure survey, etc., which are published at regular interval. The BBS is the only organ of the government, who provides much information on socio-economic and developmental indicators including nutrition through its reports. The policy makers and planners are using these data. The INFS of the University of Dhaka has been conducted national nutrition surveys and publish data at different period, which are useful in national planning and policy formulations. Health and population surveys (including nutrition data) are conducted by NIPORT with the assistance of donors and consulting agencies. Nutrition surveillance project (NSP) provides comprehensive, accurate and timely information to create an interactive mechanism for planning, monitoring and evaluating child nutrition and health in Bangladesh. This is a collaborative effort between HKI, IPHN, UNICEF and 16 local NGOs. The periodical findings of the nutrition surveillance project are distributed among the policy makers, bureaucrats,

planners, professionals, program managers and administrators. This surveillance system played useful role in policy implementation. For example, the nutrition surveillance reports on the tornado in Tangail district and on the devastating flood in 1998 has great implications on the nutrition rehabilitation activities in affected areas of the country. The BNNC, BARC and BMRC are conducting, collaborating and coordinating substantial amount of research on different aspects of nutrition according to the need of the country. The results and recommendations of these researches are being reflected in updating future policies, plans and programs of the country. A number of operation research projects of the Bangladesh Integrated Nutrition Program (BINP) have been coordinated by ICDDR'B and conducted by different research organizations of the country. The operation research findings and recommendations are being considered during implementation of the BINP and preparation and implementation of the National Nutrition Program (NNP) in the country.

Besides, different research institutes of the country like, Institute of Nutrition and Food Science (INFS), Bangladesh Institute of Development Studies (BIDS), Institute of Child and Mother Health (ICMH), Institute of Food Science and Technology (IFST), Bangladesh Institute of Research and Training on Applied Nutrition (BIRTAN), Bangladesh Rural Development Academies at Comilla and Bogra, College of Home Economics of the University of Dhaka, Medical and Agricultural Universities are conducting research in the field of nutrition and relevant subjects, the research findings of which are very useful during policy formulation and implementation.

The information and data available from all these organizations at different point in time are quite different and sometimes difficult to understand and clarify. The data sources have strengths and weakness. The sampling design, size, area of the study (regionality), seasonality, skill in data collection, methodology, quality control measures, etc. makes differences in estimates, which ultimately makes confusion among the researchers. For example, the average caloric consumption estimates of BBS and INFS are different. The average per capita per day calorie

consumption rate of BBS is higher than the rate of INFS. In this case, the BBS estimated it by considering the production/availability of food in the surveyed households and the population of those households who consume foods, while the INFS conducted dietary intake survey using 24 hour recall method and measuring the actual food consumed. There are debates between the political leaders and technical people on this issue. The political leaders blamed the technical people that they are underestimating the calorie intake for receiving donors support/assistance. On the other hand, the technical people criticized the political leaders that having less calorie intake they are making political stunt of attaining self-sufficiency in food by showing the overestimate of calorie intake.

Each and every organization has the valid reason to justify the data regarding its accuracy, authenticity and validity. The national use of any data or information generally requires consensus among the professionals, planners and policy-makers. The data or information available from different sources is thoroughly discussed in a meeting to come to an agreement for using it as a national data.

The UN agencies and other international organizations like, UNICEF, WHO, FAO, World Bank, IFPRI, etc. are compiling data and published in their reports for international uses. In the world development report, the state of the world children, etc. are publishing nutrition data regularly. There are also discrepancy on data published in different reports. This is happened due to source of the information. Progotir Pathey, Women in Development (WID), Population Data Sheet, etc. publish nutrition data for national use in the country. These data and information are very useful to the program planners, managers during the implementation of the project.

2.2.1 Basic Terms

The basic terms used to indicate nutrition and related data/information in this chapter are described below.

- ***Stunting:*** The percentage of children 6-59 months with height-for-age < -2 Z scores, chronic malnutrition.

- ***Wasting:*** The percentage of children 6-59 months with weight-for-height < -2 Z scores, acute malnutrition.
- ***Underweight:*** The percentage of children 6-59 months with weight-for-age < -2 Z scores.
- ***Standard deviation scores:*** A measurement of how far a child's nutritional status deviates from the internationally recommended reference population (WHO/NCHS).
- ***Malnutrition:*** It is defined as less than –2 standard deviations from the mean (< -2 Z scores) for stunting, wasting, and underweight.
- ***Low Birth Weight (LBW):*** It is defined as the birth weight of the infant of less than 2500 gm.
- ***Clinical Vitamin A Deficiency:*** It is the prevalence of night blindness, the first clinical symptom of xerophthalmia, among children 12-59 months.
- ***Sub-clinical Vitamin A Deficiency:*** It is determined at the serum retinol level below 0.7 μmol/L or 20 μg/dL among preschool children (12-59 months).

2.3 NUTRITION SITUATION IN BANGLADESH

Malnutrition is endemic in the country, with high infant, under five and maternal morbidity and mortality. It causes decreased earning capacity, increased disease burden and resulting in worse poverty. It was stated that inadequate food intake is one of the causes of malnutrition in Bangladesh. The food intake is about 82.0 percent against the recommended dietary allowances (RDA) only (13). The consumption of pulses and legumes were very low, only 17.5 percent of the requirement (79). Besides, micronutrients consumption are also very low, the consumption of riboflavin and vitamin C are 50 percent and 26 percent of the requirement (79). The RDA/RDI generally used in Bangladesh is country specific.

A Child Nutrition Survey of Bangladesh has been conducted in 1995-96. From the survey results the prevalence of protein energy malnutrition among the young children having age of 6-71 months and 12-23 months has been shown in Table 2.2 (80). The reference value used in this survey is from the US National Center for Health Statistics (NCHS) and is recommended by the World Health

Organization (WHO). This is an accepted international standard to compare the results of the anthropometric parameters measured in this study (80). It showed that 51.4 percent children of 6-71 months age were stunted, in which the percentages of boys and girls were almost the same (Table 2.2).

The severely stunted children were 24.2 percent. The prevalence of wasting was 16.6 percent in this age group, the rate of wasting among the girls (17.3%) were comparatively more than the boys (15.9%). The severely and moderately wasted children were 2.5 and 14.1 percent respectively (Table- 2.2). The prevalence of underweight was 57.4 percent, in which severely underweight was about 18 percent.

A total of 89.7 percent children were found with different grades of malnutrition. Severe protein energy malnutrition was found in 4.3 percent children. The girl children (5.4%) suffer more than the boys (3.3%) in severe protein energy malnutrition.

Table-2.2: Prevalence of Protein Energy Malnutrition in Young Children

Indicators	**National** (-2 SD of NCHS reference)	**Boys** (-2 SD of NCHS reference)	**Girls** (-2 SD of NCHS reference)	**Severe** (-3 SD and below of NCHS reference)	**Moderate** (-2.99 to –2SD of NCHS reference)
Children (6-71 months) Stunting	51.4	51.6	51.2	24.2	27.2
Wasting	16.6	15.9	17.3	2.5	14.1
Under-weight	57.4	56.7	58.1	17.9	39.5
Children (12-23 months) Stunting	57.4	57.0	57.8	25.2	32.2
Wasting	29.7	32.3	26.7	5.8	23.9
Under-weight	65.8	67.2	64.1	26.5	39.3
Children (6-71 months) Mild, moderate and severe PEM by Gomez classification	**National** 89.7%	**Boys** 88.5%	**Girls** 90.9%		
Severe PEM	4.3%	3.3%	5.4%		

The prevalence rate of stunting, wasting and underweight was higher among the children of 12-23 months than the children of 6-71 months (Table 2.2).

The maternal malnutrition scenario in Bangladesh is alarming. The weight of women of childbearing age (15-49 years) in urban and rural areas was 41.8 kg and 40.1 kg respectively. The height of women of childbearing age was 148.8 cm and 148.1 cm in urban and rural areas respectively. The weight gain during pregnancy was 4.7 kg and 5.7 kg in rural and urban areas respectively (79). Because of these maternal nutrition situation the children are born with low birth weight (<2500 gm). The children born with low birth weight in rural and urban areas was 41.2 and 27.0 percent respectively (79).

The micronutrient malnutrition is a serious issue in Bangladesh. The deficiencies of vitamin A, iodine and iron are the major micronutrient problems in this country. In Bangladesh vitamin A deficiency has been documented as a public health problem since the 1960s and has been identified as a single most important preventable cause of blindness among children (81). Vitamin A programs in this country have been strengthened and expanded to improve the vitamin A status of preschool children through vitamin A capsule (VAC) distribution and programs to increase the production and consumption of vitamin A-rich foods. Clinical vitamin A deficiency (xerophthalmia) among preschool age children in rural Bangladesh has been reduced to levels below the cut-offs established by the World Health Organization used to define a public health problem. It is reported that the prevalence of night blindness, the first clinical symptom of xerophthalmia, among children 12-59 months of has been reduced from 3.5 percent in 1982/83 to 0.62 percent (95% CI 0.57-0.78) in 1997/98. Other signs and symptoms of xerophthalmia (Bitot's spots, keratomalacia, corneal scarring) also declined significantly from the last survey and are currently at or below the levels established by WHO/IVACG for problems of public health significance (82). The coverage of the VAC distribution program was substantially higher in 1997 than in 1982/83 in all the six divisions of Bangladesh. Besides, home gardening program has the contribution to increase production and consumption of vitamin A-rich

vegetables and fruits in the country. The sub-clinical vitamin A deficiency (serum retinol <0.7 µmol/L or 20 µg/dL) among preschool children was 22 percent which is still a public health problem in rural Bangladesh according to the criteria established by the WHO and IVACG. Maternal vitamin A deficiency is a public health problem in Bangladesh. The prevalence of maternal vitamin A deficiency among pregnant, lactating and non-pregnant/non-lactating women in rural Bangladesh were >2.7, 2.4 and 1.7 respectively (82). The success of nutrition interventions over the decades in reduction of vitamin A deficiency has implications for the development of policy.

The whole people in Bangladesh are at risk of iodine deficiency disorders. The prevalence of goiter was 47 percent, in which visible goiter was 9 percent and palpable goiter was 38 percent. About 69 percent people of this country were biochemically iodine deficient (83).

The nutritional anemia is a major problem in the country. It was observed among 74 percent adult female, 80 percent pregnant and lactating mothers, and 73 percent children below 5 years of age. About 40 percent adult male were also suffering from nutritional anemia (79).

The macronutrient intake in Bangladesh is also quite alarming, which has been shown in Table 2.3. The average calorie intake during 1995-96 was found to be 1868 Kcal at national level, while it was 1892 Kcal at rural and 1779 Kcal at urban areas (84).

Table-2.3: Nutrients intake in Bangladesh in 1995-96 (84)

Nutrients	National	Rural	Urban	RDA
Calorie (Kcal)	1868	1892	1779	2310
Protein (mg)	46.93	46.36	48.99	45
Vitamin A (IU)	1668	1571	2017	2013
Riboflavin (mg)	0.48	0.47	0.53	-
Vitamin C (mg)	32.80	31.93	35.97	26
Thiamin (mg)	1.17	1.19	1.11	-
Niacin (mg)	19.34	18.61	17.37	-
Calcium (mg)	335.34	327.71	362.87	-
Iron (mg)	11.38	11.01	12.67	15

The urban caloric intake has been deteriorating because of rural migration of poor people to cities and towns and living in the urban slums with inhuman condition. The average protein intake during the same period was 46.93 gm, 46.36 gm and 48.99 gm at national, rural and urban level respectively (Table-2.3). The intake of vitamins (vitamin A, riboflavin, vitamin C, Thiamin and Niacin) and minerals (Calcium and Iron) indicated that urban people's consumption was higher than the rural people's consumption.

There is malnutrition even among the children of not so poor families. This is due to lack of selection of right kind of food and inappropriate distribution of food within the household. The nutrient intake has been reported declining during the survey than the previous surveys conducted in 1962-64 (85), 1974-75 (86), 1981-82 (87) and 1995-96 (84) (Table - 2.4).

There is gradual reduction in per capita per day consumption of calories, protein and the important micronutrients (Iron, vitamin A and iodine) over the last five decades. In 1995-96, all nutrients consumption except protein and vitamin C were much below the minimum requirement (Table-2.4).

Table- 2.4: Trend of nutrients intake per capita per day in Bangladesh, 1962-1996.

Nutrients	Daily Requirement	Per capita daily intake			
		1962-64 (85)	1975-76 (86)	1981-82 (87)	1995-96 (84)
Calorie (Kcal)	2310	2310	2094	1943	1868
Protein (g)	45	57.5	58.8	48.4	46.9
Vit.A (I.U.)	2013	1590	730	763	1668
Iron (mg)	15	10.3	22.2	23.4	11.4
Vit. C (mg)	26	48.0	9.5	13.0	32.8
Iodine (µg)	150	-	-	-	-

However, food production, particularly rice, vegetables and fruits has been increased comparatively more than the previous time. But the increase in population has created tremendous pressure on the availability of food.

2.4 FOOD INTAKE, FOOD HABIT AND DIETARY PATTERN

The food intake, food habits and dietary pattern among the people in Bangladesh varies regionally and seasonally. Most of the people consume rice as principal food. Supply of most of the calories comes from it. The Bangladeshi people generally consume rice, vegetables, pulses and legumes, and small quantities of fish, if available. Occasionally they consume meat, beef, chicken, eggs and milk in small amounts. Seasonal fruits like jackfruit, mango, black berri and guava are also consumed. Green and ripe papaya and banana generally grow throughout the year are consumed by the people. Consumption of fat and cooking oil are very less than the expectation. The food intake of the Bangladeshi population has been assessed by several dietary surveys conducted in this country (84,85,86,87). The trends in food consumption (per capita per day) pattern from 1962-64 to 1995-96 have been shown in Table 2.5.

The data showed long term deterioration in per capita food intake over the entire 1962-96 period (Table-2.5). Compared to situations prevailing in early eighties, the average rural consumption level seems to have declined for a variety of food items, which is striking. The declining trend is particularly pronounced in case of cereals (88). The rapid awareness on the nutrient value and importance of roots and tubers, particularly potato and sweet potato, encourages the people for their consumption. The increase in consumption of roots and tubers decreases the pressure on cereals and thus result in the declining trends. Consumption pattern has been increased in case of roots and tubers both in rural and urban areas. Carrots and cucumbers are now available in the streets and consumed raw by different classes of people. Pulse intake has been found to a declining trend between 1962-64 and 1995-96. The land used for pulse production has been used now for rice production because it is profitable to the farmers. Fish consumption has showed an increasing trend. It increased from a level of 23 gm in 1981-82 to 32 gm in 1995-96. Egg consumption has also showed an increasing trend. The increase in production as well as consumption of fish and eggs has been possible due to the policy guidelines being implemented by the Ministry of Fisheries and

Table-2.5: Trends of Food Consumption (Per capita per day) from 1962-64 to 1995-96 in Bangladesh.

Food Items	Popula -tion type	1962-64 (85)	1975-76 (86)	1981-82 (87)	1995-96 (84)	RDI
Cereal (gm)	All	488.0	-	-	436.0	434
	Rural	537.0	523.0	488.0	452.0	
	Urban	363.7	-	-	379.0	
Roots and Tubers (gm)	All	48.8	-	-	72.0	243
	Rural	55.5	52.3	63.0	70.0	
	Urban	31.6	-	-	77.0	
Pulses (gm)	All	27.6	-	-	11.0	40
	Rural	28.0	23.8	8.0	10.0	
	Urban	26.5	-	-	16.0	
Vegetables:						213
Leafy	All	13.6	-	-	23.0	
vegetables	Rural	15.8	20.2	20.0	21.0	
(gm)	Urban	8.0	-	-	31.0	
Non-Leafy	All	120.93	-	-	89.0	-
vegetables	Rural	118.8	105.5	100.0	92.0	
(gm)	Urban	126.4	-	-	77.0	
Fruits (gm)	All	15.1	-	-	14.0	56
	Rural	10.15	20.6	17.4	13.0	
	Urban	17.5	-	-	18.0	
Animal foods:						98
Meat (gm)	All	9.5	-	-	9.0	
	Rural	5.7	4.0	5.0	6.0	
	Urban	19.4	-	-	21.0	
Fish (gm)	All	35.4	-	-	33.0	-
	Rural	33.0	22.3	23.0	32.0	
	Urban	41.9	-	-	37.0	
Egg (gm)	All	1.9	-	-	4.0	-
	Rural	1.6	1.1	1.2	3.0	
	Urban	2.5	-	-	7.0	
Milk and	All	27.4	-	-	15.0	-
milk pro-	Rural	17.32	17.0	15.0	13.0	
ducts (gm)	Urban	53.2	-	-	20.0	
Fats and oil	All	8.3	-	-	8.0	20
(gm)	Rural	6.2	3.0	3.0	6.0	
	Urban	13.7	-	-	13.0	
Sugar (gm)	All	8.8	-	-	7.0	14
	Rural	7.4	7.3	8.7	6.0	
	Urban	12.4	-	-	9.0	
Others	All	3.2	-	-	7.07	
(gm)	Rural	4.23	7.2	12.7	6.82	
	Urban	9.3	-	-	8.0	

Livestock. The youth and women cooperatives in rural areas and private entrepreneurs are encouraged to pisciculture and poultry rearing for income generation through provision of loan and availability of different high yielding varieties.

Milk and milk products intake has been declined in the rural areas significantly between 1962-64 and 1995-96. Intake of cooking oil has been increased during 1995-96 from seventies and eighties, but it was almost similar to the intake of 1962-64.

The per capita sugar intake in average has been fewer in both rural and urban areas in 1995-96 than in the previous years. However, the food consumption pattern among the Bangladesh people does not indicate any development towards nutritional improvements.

Food habits of the people in Bangladesh are dependent on the religious beliefs, cultural and environmental conditions. Majority of the people are Muslims who consume beef but not pork, while the food choices of the minority Hindus are reverse due to religious beliefs. During fasting month of Ramadan most of the Muslims do not consume any food in the day while during Hindus fasting festival they can drink liquid juices but no solid foods. Because of superstitions or food taboos the women could not take some varieties of fish during pregnancy in the country. The people consume predominantly rice as the main food. Meat, fish, eggs, milk and milk products are consumed in fewer amounts. Traditionally the household head consumes the best portion of the cooked food in the family, while the women are neglected. They are the last eating members in the household. Breastfeeding is almost universal in the country. The exclusive breastfeeding up to six months of age and colostrum feeding rate has been recently increased because of continuous propagation of messages on its importance. In 1983, Islam et al. (89) reported that 84 percent were exclusively breastfed at birth while 14 percent had supplementary feeding along with breastfeeding. Complementary feeding was given with bottle in 80 percent and cup and spoon was used in 20 percent. Baqui et al. (90) studied in urban slum of Dhaka city reported that less than 10 percent

babies were put to breast within one hour, 50 percent received breastmilk in the first day, 10 percent on the second day, 13 percent on the third day and 30 percent of them did not received breastmilk within three day's of birth. While Bhuiya (91) reported in 1996 that 54 percent mothers said a newborn should be fed 60 minutes after they are born. Regarding first food the vast majority said honey, while 9 percent mothers said sugar water and only 5 percent said feeding of colostrum. Malek et al. (92) in 1986 reported the long-term effect of nutrition education on children in rural Bangladesh using local health volunteers. Training was given in seven sessions and impact was seen after fifth session on fall in malnutrition from initial high level of 65 percent of grades II and III of Gomes classification to 25 percent at the seventh round. It was concluded that mothers are quite receptive to change when they can see the real benefit of gained knowledge, which does not threaten their limited resources and value system.

The children are reared and cared by the mothers and the grand mothers. Sometimes their younger sisters care them. The trends of increased workload of women in the households and also employment to other outside activities like garments factories, maintenance of rural roads, embankments, etc. have created changes in food habits.

2.4.1 Dietary Guidelines for Bangladesh

Dietary guidelines are sets of advisory statements that give dietary advice for the population to promote overall nutritional wellbeing and relate to all diet related conditions (93). Truswell stated that the aim of the dietary goals or guidelines is not to provide enough of the essential nutrients but to reduce the chances of developing chronic degenerative diseases (94). Several countries, particularly the affluent ones, issued guidelines in the 1970s and 1980s focussing on dietary modifications to reduce the risk of chronic degenerative diseases (95). The policies on implementation of dietary guidelines, both in developed and developing countries, made tremendous contribution towards nutritional improvements. Bangladesh has formulated the dietary guidelines for its people

through a workshop with the participation of professional nutritionists and stakeholders of the country. These guidelines are food-based as various foods are abundantly grown and commonly consumed by the people of Bangladesh. The food-based dietary guidelines of Bangladesh have been presented in Table-2.6.

Table-2.6: Dietary Guidelines of Bangladesh

No.	Guidelines
1	**Eat a variety of food everyday** Eat from a variety of foods available in the locality. Give extra foods to pregnant and lactating mothers. Give varied and adequate foods to growing children. Give suitable diet to the elderly.
2	**Promote breastfeeding and proper complementary feeding** Promote the advantages and importance of breastfeeding. Learn and practice the techniques of successful breastfeeding. Breastfeed exclusively for the first six months. Start home-made complementary foods when the baby is six months old.
3	**Ensure food intake to maintain desirable body weight** Weigh all the family members regularly, if possible.
4	**Eat clean and safe foods** Eat clean and fresh foods that are free from contamination. Clean the fruits and vegetables when eaten raw. Practice safe food storage, handling, preparation and service. Avoid rotten, stale and uncovered foods.
5	**Eat moderate amounts of fats and oils** Give more fats and oils to growing children. Vegetable oil should be preferred in cooking. Use fat/oil in cooking, specially when cooking leafy vegetables.
6	**Eat plenty of vegetables and fruits everyday** Eat colored leafy vegetables and fruits. Eat fresh fruits and vegetables everyday.
7	**Use iodized salt** Promote the use of iodized salt in cooking and preparing foods. Avoid eating too much salt and salty foods. Limit salt intake to 5 to 10 grams per day.
8	**Drink safe water** Drink plenty of safe water everyday.
9	**Practice healthy lifestyle** Enjoy your meals with family members. Be moderate in what you eat and drink. Avoid smoking and control stress. Brush your teeth everyday. Walk everyday.

Bangladesh National Nutrition Council has taken the leadership in formulation of the food-based dietary guidelines in 1997. The Bangladesh Dietary Guidelines included 9 key messages (96) for the people, which have been widely publicized during the National Nutrition Weeks.

These guidelines are very simple, easy to understand and implementable in the rural community. The government has already approved the guidelines through the meeting of the Bangladesh National Nutrition Council. The dietary guidelines have been printed as leaflets and distributed from central to the village level for dissemination during the National Nutrition Weeks. Its simplicity, understandability and acceptability to the community were assessed during the survey of the effectiveness of National Nutrition Week. Majority of the respondents stated that the guidelines are simple and easy to understand, but difficult to implement, as many people are illiterate. But they agreed that it could be implemented successfully, if colored pictures of different varieties of foods and important materials are printed in conformity with the guidelines (97). Measures are being taken to print the dietary guidelines with colored pictures by the National Nutrition Council. The guidelines need to be followed by every members of the family to avoid nutritional problems, particularly nutritional deficiency disorders.

Dissemination and practice of the approved food-based dietary guidelines will pave the way of making a healthy and nutritionally sound lifestyle in the country.

2.5 FOOD SECURITY, DISEASE CONTROL AND CARING PRACTICES IN BANGLADESH

Malnutrition is caused by a number of factors that can be grouped together as being related to food, health and behavior. Consequently, efforts to reduce malnutrition through the delivery of health and nutrition services alone cannot be as effective as those that also address the other important factors (98). These three preconditions for sound nutritional development such as "food", "health" and "care" require resources– human, economic and organizational. Insufficient

household food security, inadequate care of women and children and insufficient health services and unhealthy environment are the underlying causes of malnutrition in Bangladesh like all other developing countries. The availability and control of resources are basic determinants for child survival, growth and development.

2.5.1 Food Security

Food security is defined as access by all people at all times to the food needed for a healthy life (71). To achieve food security three major components are important, such as, availability, accessibility and utilization. Adequate production and supply of safe and nutritious food should be *available* at both national and household level. There has to be reasonable stability in the supply of food spatially and seasonally. Each household should have physical, social and economic *access* to sufficient, safe and good quality food to satisfy its need.

In Bangladesh, both chronic and transitory household food insecurity is serious. Available data suggest that a quarter of the population consume fewer than 1800 Kcal per day, with about 15 percent getting fewer than 1600 Kcal per day (98). Bangladesh has made substantial progress in increasing food grain production over the last two decades. The Bangladeshi farmers have responded well to changing market opportunities and government policies in their allocative decisions. As a result, the agriculture sector progressed over the years since independence in 1971, at the average annual rate of 2.76 percent (99). This was slightly higher than the annual population growth rate of 1.26 percent during the same period. Yet, about half the population of Bangladesh lives in poverty, lacking adequate resources to meet their basic human needs, including food (71). Food security continues to be one of the most critical issues in attaining both economic and social stability in Bangladesh. The main objective of the 'Food Policy' is to ensure food security to all in general and the household level food security in particular. The availability and access to food is of paramount importance and a critical issue for the government. Self sufficiency in food grains can be achieved in

a normal year, but food security – defined as the undisrupted and timely access of the population to food supply for a healthy diet, has yet to be ascertained. During the Fourth Plan period, food sub-sector has undergone major improvements. With the growth in food grain production as well as development of infrastructure, marketing of food grain increased manifold. Growth in private food grain trade enabled the government to moderate intervention in the food grain markets. All restrictions and obstacles for participation of the private sector in food grain trade and management have been removed. The operation of food grain under Public Food Distribution System (PFDS) declined following abolition of some commercial channels. The food grain storage capacity has been increased and government undertook projects for rehabilitation and reconstruction of food godowns and modernization of food distribution system.

There has been impressive agricultural and socioeconomic progress in Bangladesh during the recent past. Rice production nearly doubled during the past 25 years, from 10 to 19 million tons, modern varieties spread from 11 percent to 55 percent of harvested rice area, and cropping intensity grew from 143 percent to 180 percent (100). Food insecurity is a critical concern of the Government of Bangladesh, since 60-65 percent of the population subsists below the food-based poverty line (of 2122 Kcal/cap) and child and maternal malnutrition are prevalent. According to BARC projection the demand for food grain in the country at 2 percent income growth is supposed to reach 25.2 million metric tons in the year 2000 and 43.82 million metric tons in the year 2030. The Ministry of Agriculture in the Crop Production Plan for Bangladesh up to 2010 suggests food grain production volume of 24.53 million metric tons in the year 2000 and 29.1 million metric tons in 2010. But if 2 percent food grain production growth rate is considered Bangladesh will continue to remain highly deficit in food grain for long time. At 3 percent food grain production growth rate, the country will attain self-sufficiency in food grain to meet the total demand through domestic production by the year 2030. At 4 percent production growth rate the country will meet total demand from domestic production by around 2010 (100). The average energy

deficiency in the country is about 10-15 percent. Most of the energy comes from rice, which resulted PEM among the vulnerable population like children less than 5 years of age. Food aid is an important component of food security for the poor. Poor households require additional entitlements (income earning opportunities or transfer of foods or of cash) to augment their capacity to acquire food. But lower levels of food aid are likely to result in less total resources for poverty alleviation. Donor's long-term commitments to food security are necessary. The commitment of food aid and other aid might not be linked with the size of national food gaps only. Poverty is the root cause of food insecurity in the country. The targeted program for sustainable incomes for the poor are necessary. Food security for all can only be achieved in Bangladesh through long-term investment in economic growth with equity, increased domestic food production, and enhanced health and nutrition services (101).

Therefore, the strategy for food security in Bangladesh is to fully harness the growth opportunities to achieve self-sufficiency in food production in an economically and environmentally sustainable manner.

2.5.2 Disease Control

The Bangladesh Government has prioritized those intervention in the health and population sector which will have the greatest impact per taka spent. The decision was based on the World Development Report 1993 (102), which had identified such interventions based on the lowest cost per disability-adjusted life-year gained. The report estimated that for countries like Bangladesh an amount of US$ 12 is needed for a package of public health, family planning and curative services. But at present Bangladesh has about US$ 4 per capita available for all its health and population services (103).

In spite of the difficulties, during the nineties, considerable progress has been achieved in Bangladesh in the fields of health and family welfare. The immunization program, which has been acclaimed worldwide, now covers more than 70 percent of children compared to 55 percent in 1990-91. Primary health

care facilities have been expanded throughout the country. Infant and maternal mortality rates have come down dramatically. Contraceptive prevalence rate has increased to around 51 percent, as a result of which population growth rate is now below 2 percent (104). The Government is actively involved in providing primary health care facilities through Union, Upazilla Health Complexes and Community Clinic; Secondary health care facilities through District level hospitals; and tertiary health care facilities through Medical College Hospitals, post-graduate institutes and specialized hospitals at Divisional and National levels. Besides, a good number of NGOs and private organizations are involved in health and population sector towards control of diseases.

The Government has launched the Health and Population Sector Program (HPSP) since July 1998. This is a new approach to health development in Bangladesh. The vision of the program include: priority in allocation of public sector expenditures to support services for poor, vunerable groups, especially poor women and children; provision of an essential services package (ESP); gender sensitive, pro-poor and client focused services; ensuring stakeholders participation; program management based on sector-wide approach and decentralization; and restructuring of the existing bifurcated health and family planning service provision through a unified structure. The objectives of the program are to achieve a client-centred provision and utilization of an essential services package, plus selected services.

The World Bank report (105) stated that despite remarkable progress during the past three decades in the slowing population growth and improving the health of the population, access to quality health care still remains out of the reach of the millions of Bangladeshi people, especially for the poorest of the poor. It also stated that there is now a consensus among policy makers that further reductions in fertility, maternal and child mortality, and the disease burden will depend upon the effective package of essential services to the entire population at the local level. The Government's plan to establish new 13000 community clinics will be one important step in maintaining readily accessible services for disease control.

2.5.3 Caring Practices

Caring is very important to attain nutritional improvement in the country. Earlier it was neglected and no attention was given. But now it is getting more importance to the physicians and nutrition scientists. Care starts from the mothers, who are both the seed and the soil in which the baby grows for nine months. Women who are poorly nourished or sick are more likely to give birth prematurely and their babies are at increased risk of death and disability.

Therefore two issues are being addressed in Bangladesh: (i) care of the mother in pregnancy, child birth and during lactation; and (ii) essential care of the newborn. Locugamage A. identified important issues in relation to helping mothers make healthy babies (106) which include important care of the women.

Care being proposed in the National Nutrition Program (NNP) for provision before pregnancy by ensuring good nutrition for girls during infancy, childhood and adolescence in the country; schooling for girls and improving women's status in the society. Care during pregnancy, planning of childbirth, care during and after delivery and essential care of the newborn is important. The Government of Bangladesh in Health and Population Sector Program (HPSP) has included provision of all these cares with due consideration (107).

The nutritional development in Bangladesh has been getting considerations as political priority, socioeconomic and developmental issues, and also as human right.

2.6 Food Aid for Food Security

Food aid is an essential component for food security of the poor in Bangladesh where poverty is prevalent. The poor people do not have the ability to buy food until they have income or sources of income. They require some income-earning opportunities or cash to buy food for them. Food aid generally helps the poorest of the poor. But lower levels of food aid do not help significantly. The poverty stricken population of Bangladesh is lacking of inadequate resources to meet their basic human needs, including food. Millions of households are

threatened by natural disasters, such as the devastating flood that often involve substantial loss of lives and short-term emergency needs for food and shelter in Bangladesh. In this context of chronic poverty and a hazardous natural environment, the Government of Bangladesh is firmly committed to achieving food security for all. The Government, with the support of the donor community, devotes substantial resources to increased food production and economic growth and operates a Public Food-grain Distribution System (PFDS) to help stabilize food prices and provide targeted support to poor.

Poor households in Bangladesh do not enjoy food security, because they lack access to food, i.e. they lack sufficient food from own production, cash incomes and other resources to acquire enough food. There were two recommendations of the 1997 Bangladesh AID Group meeting held in November emphasizing increased access to food for the poor. The first recommendation was to further generate income raising opportunities for the rural poor, which is addressed through numerous development projects currently being implemented, including Food for Work project, and will be discussed further in this chapter. The second recommendation was to increase food assistance development programs for the poorest of the poor, which has also been implemented and is in fact consistent with the medium-term trend in 1990s (101).

Poverty and food insecurity caused by inadequate access to food is chronic problems that continue even in the absence of floods or other natural disasters. There is a need of a steady and increasing flow of resources to tackle the food security problems in Bangladesh. The donors should have a long-term commitment to food security and not to link food aid and other aid only to the size of the food gap in the country, if they really mean business.

Adequate domestic production of food has been possible due to the agricultural production-oriented policies of the government, a substantial progress has been achieved in terms of availability of food-grains in Bangladesh. The per capita availability of food-grains has remained stable over time with an average of 162.7 kgs in 1981-90, increasing slightly to an average of 163.6 kgs in 1991-99.

The per capita rice availability, however, actually increased from 137.1 kgs to 142.2 kgs largely due to expanded rice production,.particularly in the boro (winter) season, made possible through adoption of High-Yielding Varieties (HYVs), expanded irrigation and increased fertilizer use. As food aid level was declined, per capita wheat availability actually from 25.6 kgs in the 1980s to 21.5 kgs in the 1990s (108). Farmers benefited from the new technology as their food-grain increased significantly. Consumers also benefited because of increased production of rice and decreased real rice prices. Meanwhile, agricultural planning has continued to focus on rice self-sufficiency.

2.7 Role of Disasters

The people of Bangladesh face almost every year some types of natural calamities, like devastating floods, cyclones, tornadoes, drought, etc. All these calamities create lot of problems to the people, particularly rural poor. Even people, either poor or marginal, do not have access to food due to devastating flood all over the country. The non-flood affected people, government organizations and non-government organization work together to help the flood victims. They rushed to the affected areas with prepared food, dry foods, clothing's, cooking utensils, safe water, etc. and distribute those among the victims. Besides, government responded to this crisis through supplying food for immediate relief efforts during the flood and helping to coordinate food aid commitments and deliveries.

The 1998 flood caused 636 million Taka of damage to 45 investment projects in the agriculture crop sub-sector. To meet this expenses and mobilize its own resources for the rehabilitation programs, the Government readjusted its original allocation to ADP projects in the agricultural crop sub-sector, reducing the original allocation to 86 projects by 209 million Taka. For rehabilitation of 18 of these projects, the Planning Commission reallocated 228 million Taka. Ministry of agriculture has also undertaken 12 short and medium term projects, valued at 6794 million Taka, to increase the stability of agricultural crop production. These

projects include supplemental irrigation of aman rice, provision of diesel fuel and electricity for farmer irrigation and rehabilitation of 1200 shallow tube wells.

During the 1998 flood when water covers more and more areas of the country, the government of Bangladesh made an appeal for aid for flood relief and rehabilitation on 26 August, 1998 to the international community and donors. The donors and different country commitments were received immediately for food aid to the flood victims. Without wasting time, the Government of Bangladesh increased post-flood food-grain distribution, managed food stocks and imported food-grain through commercial channels. At the same time, as a part of its price stabilization strategy, the government encouraged private sector imports, a policy that helped avoid a food supply shortage following the flood.

In response to the appeals for aid by the government, donors pledged 1.081 million metric tons of food grain for flood relief, in addition to the 596 thousand metric tons of regular food aid. The total food aid for 1998-00 thus equals to 1.677 million metric tons, out of which 1.618 million metric tons is wheat and only 59 thousand metric tons is rice. We do not want any disaster although the disasters create opportunity of the poorest of the poor to have access to food for the time being. But sustainable program towards alleviation of poverty and more production of food can only ensure availability and access to food for improving the nutritional status.

2.8 Role of Stakeholders of the Policy

There are good numbers of stakeholders, who have been involved in the formulation and implementation process of the national food and nutrition policy. Among them the policy initiator, Bangladesh National Nutrition Council, who acts as policy-keeper and its Standing Technical Committee was instrumental for the policy formulation. The role of BNNC and its Executive Committee and Standing Technical Committee, donors, research organizations/groups, and NGOs in policy development and implementation are described as follows:

The Bangladesh National Nutrition Council (BNNC) was established in 1975 by order of the President of Bangladesh. The BNNC has been reconstituted several times by the Government for strengthening of its activities. Finally it was reconstituted on 27 October 1996. Now Hon'ble Prime Minister of the Government of the People's Republic of Bangladesh is the President of the Council. There are 13 Ministers and 7 Secretaries from different Ministries concerned with nutrition as members of the Council. Besides, there are 37 other members of the Council, who are senior administrators, policy makers, implementers, heads of relevant Government and Non-Government Organizations, nutrition experts, journalists and divisional women representatives. The Council generally meets once a year although the mandate of meeting is at least twice a year. The members of the BNNC attend the meeting sincerely and review the activities of the Council. They have taken a positive role while approving the national food and nutrition policy of Bangladesh.

The Responsibilities of the BNNC include:

- To provide guidelines about the National Food and Nutrition Policy
- To approve nutrition programs for different ministries and institutes in the light of the National Food and Nutrition Policy.
- To consider the annual reports prepared on the progress and outcome of nutrition programs.
- To guide implementation of nutrition programs of different ministries, divisions, institutions or agencies.
- To coordinate, monitor and evaluate nutrition research programs of different ministries, divisions, institutes or agencies.
- To establish and maintain nutrition information and documentation centre.
- To prepare list of indicators for proper evaluation of the result of nutrition programs.
- To decide on the inclusion of nutrition components in any programs.

- To identify specific problems of nutrition and to prepare plan of nutrition within the framework of the National Food and Nutrition Policy.
- To prepare a master plan for person-power development for the successful implementation of nutrition research and programs.
- To organize national and international conferences, seminars, workshops and training courses.
- To arrange undertaking of higher education, training or visit in the field of nutrition to national and foreign universities, educational and research institutions.
- To publish and disseminate technical and general information on the results of research and development in the field of nutrition through occasional journals, periodicals, news letters, reports, booklets, posters, hoardings, slide-sounds, TV-spots and cinema slides.
- To arrange financial supports for the nutrition related special projects approved by the BNNC and to act on other complementary or relevant activities specified
- Assign Executive Committee of BNNC to perform any one/ some of the above activities.

The BNNC has an **Executive Committee (EC)**, headed by the Hon'ble Minister for Health and Family Welfare and represented by other 14 members who are Secretaries from different concerned ministries and head of different government and non-government organizations and programs. The Secretary of the BNNC work as the Member-Secretary of the Committee. The main responsibility of this committee is to implement the decisions of the BNNC and review of the progress of nutritional activities.

The BNNC has also a **Standing Technical Committee (STC)** consisting of 11 members, who are the technical experts on nutrition and related subjects, contributed a lot for the formulation of national food and nutrition policy of Bangladesh. Actually this committee acted upon very punctually, confidently and instrumentally to the formulation of the policy. The members in this group are very

senior people in their own field of expertise and have access to the policy makers and senior bureaucrats. They act as lobbying group for the approval of the policy.

Major Activities Completed by the BNNC

The Bangladesh National Nutrition Council has completed the following activities, which are of great national importance.

- Formulation and approval of the National Food and Nutrition Policy (NFNP) 1997.
- Preparation and approval of National Plan of Action for Nutrition (NPAN) 1997.
- Development of Bangladesh Country Paper (BCP) on Nutrition in 1995, updated and published in 1997.
- Development of the State of Nutrition in Bangladesh, 1995
- Development of Food-Based Dietary Guidelines.
- Development of VGD curriculum on nutrition
- Development of Growth Card to monitor the growth of under 5 children
- Development of NNC-Bar Scale for measuring weight of the children.
- Development of Bangladesh Integrated Nutrition Project (BINP)
- Development of nutrition curriculum for all tiers of education
- Monitoring and evaluating BNNC funded research projects
- Sponsoring and coordinating nutrition research activities
- Conducting Research Projects
- Providing training on various aspects of nutrition to the staffs of various Government and non-government organizations, teachers of schools, madrashas (religious institution) and other agencies including international agency like ICDDR'B.
- Organize of National Nutrition Week every year since 1998 at national, district and upazilla level to create nutritional awareness among the people of the country.

- Providing consultancy and technical support on different aspects of nutrition to various GOs, NGOs and other development partners and donor agencies.
- Arranging different national and international seminars/ workshops/ conferences on different areas of food and nutrition.
- Providing information and documentation facilities through the Library of BNNC
- Organized different nutrition programs for dissemination through the Bangladesh Betar (radio) and the Bangladesh Television.
- Coordinating implementation of the NFNP and NPAN
- Publishing a half yearly South Asian Journal of nutrition
- Publishing a popular Bangla periodical on nutrition, Pushti Katha.

The **Secretariat of the BNNC** is responsible for providing secretarial, technical and other relevant support to the Council and its different committees. Besides, it has some other responsibilities specified in the policy document. In fact, the Secretariat of the BNNC is the most active organ of the Council, which works as a warehouse of collecting, collating, analyzing and disseminating nutrition information in the country and abroad. The BNNC Secretariat is also conducting research either by the experts of the secretariat or by contracting out to other research organizations. A list of the completed research activities presented in Table-2.7.

Among the **donor's community,** Food and Agriculture Organization of the United Nations, World Health Organization and UNICEF were initially keen to the development of the National Food and Nutrition Policy. They have contributed and supported the BNNC with the food and nutrition policies of different countries, manuals for preparing policy guidelines, etc. However, the role of some of the concerned officials was found quite different, while BNNC started strong lobbying for approval of the policy. Perhaps, it was so happened because of their own pre-conceived idea and perception. However, it was overcome while the government was convinced to adopt the national food and nutrition policy and the Prime

Minister herself declared that the National Food and Nutrition Policy (NFNP) and the National Plan of Action for Nutrition (NPAN) would be approved soon.

Table 2.7: List of BNNC Assisted Research Projects

Sl.No.	Title of the Projects
1	National Nutrition Survey of Bangladesh 1995-1996
2	Home Gardening/Kitchen Gardening /School Gardening to Increase Consumption of Micronutrients.
3	Nutrition Education Program for Creating Awareness Through Educational Institutions.
4	Effect of Nutritional Supplementation (Iron & Folic Acid) on Birth Weight.
5	Impact of Iron & other Micronutrient on the Morbidity & Nutritional Status of Urban Children.
6	A Study of the Impact of Zinc Supplementation in Malnourished Bangladeshi Children.
7	Preparation of Ready Made (Preserved) Starter Culture for Fermented Milk Products with Their Characteristic Flavor and Aroma.
8	Epidemiology of Vitamin 'A' Mal-nutrition among Selected Population Groups at Risk to Vitamin 'A' Deficiency.
9	Thyroid Status, Growth Development and Morbidity of Infant and Under 3 Children in an IDD Endemic Area of Bangladesh After Intervention: A Follow up Study.
10	The Effect of Iodine Supplementation in Vitamin 'A' Deficiency.
11	Iron Deficiency Anaemia & Work Performance of Adolescent Girls in Garment Factories.
12	Aetiology of Anaemia in Bangladesh.
13	Interrelationship of Sanitary Practices with Under Nutrition and Anaemia in Poor Urban Communities.
14	Impact of Intervention Program on Breast Feeding Practices in the Community.
15	Promotion of Home Made Weaning Food in the Rural Areas of Bangladesh.
16	Effect of Food Intake on Pregnant Women Blood, Bio-chemical Parameters and the Nutritional status of the Newborn Baby.
17	Study on the Nutritional Status of Mothers and Children in One Rural Location of Bangladesh.
18	Prevention of Night Blindness of Child under 6.
19	Impact of Growth Monitoring on Child Nutrition Mortality and Morbidity in Rural Bangladesh.
20	Monitoring of Health and Nutrition Status of Urban Pregnant Mothers Using Mother Health Card.
21	A Comparative Study on the Incidence of Geo-Helminth Ova in Different Species Green Vegetables and Cost Effectiveness of the Existing Methods of Vegetable Treatment.
22	Studies on the Nutritional Status of Urban Population.
23	Growth Monitoring as a Tool for Minimizing Infant Mortality and Morbidity.
24	Studies on Impact of Home Gardening to Supplement Vitamin A` to Minimize the Problem of Night Blindness.
25	Training on Dissemination of Nutrition Information Among Formal and Non-Formal Teaching Communities.
26	Opinion Survey on the Activities of NNW 1998.

She declared it in the Annual Nutrition Conference organized by the Nutrition Society of Bangladesh. The UNICEF was coming up to present a scientific paper on "Malnutrition: A Shortcoming of Human Civilization" (109) in the meeting of the BNNC chaired by the Prime Minister and attended by the Ministers of different ministries and other members of the Council. The challenges and opportunities of improving nutrition in Bangladesh opened the eye of the members and ultimately both the agenda of approval of the NFNP and NPAN was possible in that meeting. The approval of these two important documents was the fulfillment of the commitments of the Prime Minister of the country.

The **Research Organizations/Groups** of the country provided lot of information and data during the formulation of the policy and NPAN. Bangladesh Bureau of Statistics, Institute of Nutrition and Food Science, Director General Health Services, Agricultural Extension Departments and other Government and non-government research organizations, groups and individuals contributed with the research results to the STC and Secretariat of the BNNC. All these research results were quite useful to the policy making process. The continuous flow of research data from different research organizations and groups can be useful to the change of programmatic approach, but regular request for incorporation of data in the policy document sometimes delayed the process. Still there is necessity of regular information gathering from the research groups and individuals to monitor the policy activities.

There is a good working environment **Non-Government Organizations (NGOs)** in Bangladesh. They are working together with the government having complimentarity of activities. During the national food and nutrition policy formulation and implementation process their participation is encouraging, particularly in consensus building workshops on certain policy issues they are very cooperative and participative. The representation from the lead NGOs, such as BRAC, Grameen Bank, Proshika, Palli Karma Sahayak Foundation (Rural Employment Assistance Foundation), Nutrition Society of Bangladesh,

Bangladesh Diabetic Society, Family Planning Association of Bangladesh, etc. and also the representation of the NGO Affairs Bureau are there in the BNNC.

2.9 Nutrition Programs

There are several food based income transfer programs, which are directly relevant to nutritional improvements of the poor segment of the population. A quarter to a half of the ultra food deficit population of roughly 20 million persons, is estimated to be elderly and disabled, requiring some form of welfare assistance. The remainder is so poor that they are usually unable to access available market-based opportunities. Some form of real income transfer, coupled where appropriates with income generation assistance, if necessary for this group.

These programs include the World Food Program-assisted Vulnerable Group Development (VGD) Program, providing short term food and training assistance to female-headed and other very low-income households; the Rural Development (RD) Program of Food for Work projects; the CARE-assisted Integrated Food for Development Project (IFFD) of largely cash for work projects; the Rural Maintenance Program (RMP), which is also CARE-managed and uses monetized food aid funds; and the Food for Education (FFE) Program which provides food to eligible low-income families whose primary school children attend a certain percentage of school classes each month. The activities on food distribution system, food for work program, food for education program, food fortification and micronutrient supplementation in Bangladesh are described below:

2.9.1 Food Distribution System

Bangladesh in early 1990s phased out the expensive and highly inefficient universal rationing system, while improving targeted transfer programs, some of them provide important benefits to their recipients beyond the income transfer (110). The share of the PFDS programs targeted to poor (including Food for Work, Vulnerable Group Development, and Vulnerable Group Feeding, among others) has increased sharply in 1990s, from 39 percent in 1991-92 to 81 percent in 1996-

97. In 1997-98 this share rose to 77 percent, of which 20 percent was devoted to Food for Education (targeted to families of poor children who are attending school) and 11 percent to vulnerable Group Development (a program targeted to poor women and their families). Through March 1999, 86 percent of Government food-grain distribution has gone to targeted programs, and it was projected that for the entire fiscal year, targeted programs would receive 85 percent of total Government food-grain distribution. It seemed that the high percentage of food-grain targeted to the poor in 1998-99 continued the positive trend of the last decade (101).

An estimated 1.6 million tons of food was allocated in 1997-98 for food transfers. This amount is roughly comparable to the amount of food which would be needed, assuming perfect targeting, to move the entire ultra food deficit population in to the moderately food deficit category (per capita consumption over 1800 calories per day). But the allocation would be divided among different programs. Since all programs are not targeted to the ultra food deficit households, it is necessary to allocate all foods to them or increase the size of those operations of VGD and public works activities (110). A maximum of 10 million persons benefit with some level of food transfer assistance for some portion of the year, roughly half of the estimated 20 million individuals are from the ultra food deficit households.

2.9.2 Food for Work and Vulnerable Group Development Program

The Food-for-Work (FFW) and the Vulnerable Group Development (VGD) Programs are two major safety net programs together accounted for 43 percent of total resources released through food-assisted programs in 1994-95. Estimation of the number of beneficiaries of these transfer programs are quite difficult, the VGD is roughly benefiting 0.5 million households, while public works programs benefit roughly 1 million households. The Government of Bangladesh has the policy of poverty alleviation and thus the issue of targeting to the poorest and the poor areas is deemed to be an important topic. Poverty is that considered as the major cause of malnutrition in the country, a clear look into these programs towards nutritional

improvement is necessary, although the programs themselves have no such in-built objectives.

Both FFW and VGD Programs are targeted to the poor. About 74 percent of FFW beneficiaries and 95 percent VGD beneficiaries belong to a land size group of up to 0.5 acres, compared with roughly 50 percent recorded for all rural households in 1988-89. The FFW Program seems to be partly seasonally targeted. Historically, September-October and January-March were identified as slack seasons in Bangladesh and the FFW program was targeted to implement during these period. But with the spread of new technology in agriculture during the winter season, the importance of January-May period as slack season has greatly diminished over time. Therefore, FFW Program was needed to shift the time period to meet the crisis of unemployment in real slack season, as the pattern of distribution of FFW targeted to January-March period fails to address the problems of slack season unemployment in the period of *Mara Kartik,* a term associated with acute distress and famine syndrome (88).

The VGD program has evolved from a relief program to one, which creatively addresses longer-term needs of the targeted women in partnership with NGOs. Nearly three quarters of women are receiving food rations during an 18-month cycle and also receive a development package including training in income-generating activities and functional education. Many also receive credit for purchasing income-generating assets. Recently NNP provides an opportunity for expansion of at least the VGD program, which in turn, may offer an ideal means of addressing the household food security constraint of female headed and others particularly poor households in NNP areas. Linkage of VGD beneficiaries with the NNP activities would help them to utilize their income increments into improved nutrition status (110).

The food transfer component of the food policy is reasonably well targeted to low income households but needs to devote increased resources to the ultra food deficit population through careful expansion of the public works and VGD programs, with improved geographic and seasonal targeting.

2.9.3 Food-for-Education Program

Compulsory primary education has been started throughout Bangladesh from 1992. It was observed from different information that the school-going students are not willing to go to school. They are not attending classes after admission and leave the school without completion of the primary education. Poverty was the main reason of this. The poor parents employ their children for earning money without sending them to school for education. Food-for-education program has been started in this country since 1993. The idea of Food-for-Education was originally floated by the Task Force Report on the Poverty Alleviation set up by the Interim Government of Justice Shahabuddin (111). The program was implemented on experimental basis in the economically and educationally backward 460 Unions of 460 Upazilla in the country. The objectives of this program were:

- To increase the enrollment of the student
- To increase presence of students in the school
- To prevent drop out rate of the students

The beneficiary family of this project receives 15 kg wheat or 12 kg rice per child or 20 kg wheat or rice at its equivalent cost per two school children, provided that the children's attend at least 85% classes and all the school going children are sending to school.

The International Food Policy Research Institute (IFPRI) and Bangladesh Institute of Development Studies (BIDS) have conducted survey on the effect of the Food-for-Education Program. The findings of the IFPRI were quite encouraging. It was observed that all the objectives were achieved very successfully. The new enrollment has increased significantly in Food-For-Education Project (FFEP) schools than those of the non-FFEP schools. Not only that the income from the project has encouraged the children attending schools. The cost-effectiveness analysis of the program showed that the program spend Tk. 1.59 to transfer food costing Tk. 1.00 to the beneficiary family. On the other hand, Tk. 6.55 were spend for Rural Rationing Program, Tk. 1.32 spend for Rural

Maintenance Program (RMP) to transfer income of Tk. 1.00 in a poor family (112). The BIDS findings (113) On the basis of its empirical evidence showed that FFEP has been successful in increasing enrollment. The attendance rate of pupil in the class was significantly higher in the FFEP School, ranging between 75-78 percent, against 63 to 64 percent in the non-FFEP school. In terms of targeting effectiveness, about 74 percent of the total beneficiaries belonged to the defined target socioeconomic categories of distressed widow, landless laborers, and poor artisans. It was also estimated that about 12 to 14 percent of the total food grain allotment find way to non-poor (non-target) households. On the basis of 1995-96 FFEP macro data, it estimates that the cost-effectiveness of FFEP varies between Tk. 1.12 to Tk. 1.51. On this score, FFEP compares favorable with all other similar food intervention programs, except for the Rural Road Maintenance Program.

The recent survey (1999) of the same program showed that enrollment of students during 1993-98 increased in FFEP school to 31%, while the increase in non-FFEP school was only 13%. During this period, the rate of attendance in school increased from 71.1% to 81.8% in FFEP school, while it was from 66.4% to 71.7% in non-FFEP school. Not only that, the dropout rate was reduced from 1.4% to 1.1% in FFEP school and it was constant at 6% in non-FFEP school. The FFEP School increases interest of the students for learning and the poverty level was reduced to some extent.

This program has reached to roughly 2,5 million households of which 0.5 million fall into ultra food deficit group and contributed to the improvement of the education status of the children and of food access of their family members in Bangladesh.

2.9.4 Food Fortification

Food fortification is relatively inexpensive, the food habits of the target population are not in any way effected and there can be tangible benefits for the companies that process and market the foods. In Bangladesh, only the salt is fortified with iodine (Potassium Iodate) for the control of iodine deficiency

disorders. All the salt crushing industries (factories involves in refining salts produced by the farmers from the seabeds). When the Institute of Public Health and Nutrition conducted a survey in 1982-83, the prevalence of IDD, particularly goiter, was found alarming in the country. The BNNC organized a national workshop for the IDD in 1984 and the recommendations of the workshop, such as, lipiodol injection (Iodine in poppy seed oil) campaign in the highly endemic areas, universal salt iodization program through Bangladesh Small and Cottage Industries Corporation (BSCIC), enactment of law for the edible iodized salt and awareness about the problem and solutions of IDD were implemented. Now all the salt crushing industries have salt iodization plants and Potassium Iodate supplied by BSCIC with the assistance of UNICEF. But still the quality control of the iodized salt and enforcement of law is not satisfactory. Many salt packets in the market are found non-iodized and non-iodized salts are getting entry from the neighboring country. Double fortification of salt by iodine and iron are also being discussed in many forums, but the decisions are waiting. Many other processed food items are produced and available in the country stated fortified with minerals and vitamins. Actually some these are not at all fortified, just to attract the consumers. The results of fortification of salt with iodine has reduced the prevalence rate of goiter from about 47 percent in 1993 to 23 percent in 1999 (114). Reduction in other parameters on the prevalence of IDD was also found in this survey, which is encouraging. Fortification of wheat and oil with vitamin A is also a topic of discussion in the country. But how these food items could be fortified and reached to the appropriate target groups? Besides, the quality is important. If vitamin A is fortified with wheat and the consumer of the fortified wheat is a rickshaw-puller or canal digger, who generally consume it in the country. But he is not the actual target (because vitamin A deficiency is prevalent among the children of 6 months to 6 years, who practically do not consume wheat or wheat products) beneficiary. His excess consumption of wheat breads, because of hard work, might make toxicity. So the quantity and quality of micronutrients to be added and the choice of the vehicle is important policy issue. Bangladesh Rural Advancement

Committee (BRAC) is considering experimentation of using fortified soft drink with vitamins and minerals in BRAC schools.

2.9.5 Micronutrient Supplementation

Over 60 percent of population in Bangladesh suffer from deficiency of one or more of the micronutrients (particularly iron and iodine deficiency) (71). Vitamin A deficiency is also wide spread in the country. Among the micronutrient malnutrition, vitamin A (VA) deficiency, iodine deficiency disorders and iron deficiency anemia are most common in Bangladesh. Deficiency of nutrients, particularly that of micronutrients causes many physiological disorders and various diseases. Among the micronutrient supplements in Bangladesh, only nation-wide vitamin A capsules and sporadically Iron and Folic acid Tablets are being distributed among the target population through essential service packages of Health and Population Sector Program (HPSP).

Vitamin A deficiency has been documented as a serious public health problem in Bangladesh since 1960s. The last survey of VA deficiency in Bangladesh conducted in 1982-83, founds levels of xerophthalmia among pre-school children were 4 times higher than the cut-offs established by WHO and IVACG (115). The researchers estimated that more than 900,000 children under 6 years of age in Bangladesh suffered from some form of xerophthalmia every year. This survey also provided information on nutritional, socio-economical, geographical and seasonal factors associated with nutritional blindness. This information has been used to formulate policies and programs to improve VA status for more than 15years. Bangladesh was committed to eliminate vitamin A deficiency in pre-school children by the year 2000 and signed the declaration along with other world leaders in World Summit for Children in 1990. Supplementation of VA Capsule was done once in conjunction with the National Immunization Day in December and again during a special "Vitamin A Week" in June. As a result of these efforts, more than 80 percent of all children between 12-59 months of age (up to 71 months of age until recent changes in policy) have received VA capsules every six months through a national VA campaign since 1995 (116). As a

supplementation program vitamin A capsule distribution along with other interventions like home gardening is quite successful now and at least clinically vitamin A deficiency in this country is not a public health problem.

Iron deficiency anemia is prevalent among 74 percent adult females, 80 percent of pregnant and lactating mothers, 73 percent under five children and about 40 percent adult males in the country (77). It is planned to provide iron-folate tablets/syrup to the pregnant and lactating mothers, under five children and adolescent girls for the reduction of rate of anemia among them as supplementation. The coverage of iron and folic acid supplements through the satellite clinics to the pregnant women is poor. Lack of regular supply, absence of an effective delivery system, lack of demand creation activities through Behavioral Change Communication (BCC) and inadequate compliance due to complications are the major causes of poor coverage.

2.10 Bangladesh Integrated Nutrition Project (BINP) and Subsequent National Nutrition Project (NNP)

The **Bangladesh Integrated Nutrition Project (BINP)** is a comprehensive nutrition intervention project with several components. The project was initiated in Bangladesh with a view to combating the problems of malnutrition in the country. The community based nutrition component, which is the core component of the BINP, aims to develop a comprehensive national nutrition program with the ultimate goal of reducing malnutrition, particularly among women and children. Initially the intervention program was launched in six Upazillas of six divisions of the country with a strategy to bring sustainable changes in feeding and eating behaviors of children, and pregnant and lactating mothers at the household level. The broader project goals are:

- Reduction of infant mortality rate by half;
- Reduction of maternal mortality rate by half;
- Achievement of other FP/health goals related to maternal and child health;

- Overall socioeconomic development through increased productivity and improved learning.

It is the first attempt by the government, with financial assistance from IDA and technical support from UNICEF, to address malnutrition comprehensively. BINP plans to cover in phases only 15 percent of the geographical area of the country starting from the year 1995 through the year 2001.

The BINP has three major components:

- National level nutrition activities with four sub-components:
  - Program development and Institutional capacity building
  - Information, education and communication (IEC) development
  - Strengthening of existing nutrition activities
  - Establishing community-based nutrition interventions in phases.
- Community-based nutrition component.
- Inter-sectoral nutrition project development.

The recently completed mid-term evaluation revealed that, in intervention areas, the project successfully improved knowledge related to child care practices, mobilized communities, and reduced severe malnutrition substantially. The BINP has been successful in developing institutions for addressing malnutrition down to the community level and in mobilizing widespread community participation. It has also been successful in introducing growth monitoring of children, anthropometric measurements of pregnant and lactating women, pregnancy weight gain measurements and birth weight measurements in all BINP Upazillas. The project has been able to train and involve a large number of women in its program activities and most of the service providers are women. It has successfully introduced income generation activities at the community level through micro-credit and food preparation. The project activities also reduced substantially malnutrition from the women of child-bearing age (15-49 years) in project

Upazillas. Besides, the following intersectoral nutrition activities of BINP have also shown progress during their implementation:

- Publicity campaign on nutrition in news media; *implemented by Press Information Department of the Ministry of Information;*
- Poultry for nutrition; *implemented by Ministry of Fisheries and Livestock;*
- Assessing the effects of agricultural policies and programs on food consumption and nutrition; *implemented by the Ministry of Agriculture;*
- Development of nutrition program through intensive publicity and exhibition of documentary films; *implemented by the Ministry of Information;*
- Nutrition information communication program through Bangladesh Betar (radio); *implemented by the Ministry of Information;*
- Nutrition information communication program through Bangladesh Television; *implemented by the Ministry of Information;*
- Household food security through nutrition gardening; *implemented by the Ministry of Agriculture.*

A number of operation research projects have been conducted under the BINP. The ICDDR'B coordinated these research projects and different Government, autonomous and non-government organizations conducted these useful operation research, the results of these studies would be useful to bothe the BINP and NNP.

Considering the success of the BINP in the country, Government has planned to implement the **National Nutrition Project (NNP)** which has been prepared recently to cover initially in 139 Upazillas out of 460 Upazillas of the country. This project will be implemented between July 2000 and June 2004 and subsequently expanding over the country.

The main goal of the NNP is the reduction of malnutrition of the people, particularly children and women of the country within next one decade so that it would not be a public health problem.

The successful components of the BINP have been included as component of the project. Besides the results of the operation research conducted under the BINP will be helpful for operating the NNP. The NNP has includes some extra components in to the project to address food insecurity, malnutrition in urban slums, adolescent and maternal nutrition and moderate malnutrition among young children. The implementation of the project would be done through multisectoral participation. This is the largest project for nutrition in the country. The most of the components of the project will be implemented through NGOs of the country who have already been experienced during BINP implementation. During the first year of NNP, the NNP project management will learn lessons from BINP experience and prepare for expansion of areas (Upazillas), and the BINP will be merged with NNP at the end of the project period.

The Government has approved the NNP recently. The Government of Bangladesh, World Bank and other development partners will finance the project. But although the name of the project is NNP and being implemented by few Ministries, it does not cover many components that are reflected in the NFNP and NPAN. Many other nutrition and nutrition related components need to be implemented through other sectoral projects.

Chapter 3

METHODOLOGY OF THE STUDY

CHAPTER 3

METHODOLOGY OF THE STUDY

3.1 STUDY DESIGN

The study was carried out between July 1997 and March 2000 in Bangladesh. Numerous documents and scientific papers on the national food and nutrition policies of different developed and developing countries have been collected and used to verify factual statements. The information on the policy formulation process, policy implementation and its progress with effectiveness in selected countries have been reviewed, analyzed and compared with the national food and nutrition policy of Bangladesh.

Qualitative approach was used to obtain information from the Key Informants. Information was obtained from 40 senior officials for verification and analysis, who were identified as Key Informants. The Key Informants were mainly high-ranking authorities from government, autonomous, non-government and private organizations. Focus group discussions (FGDs) were also conducted for assessment of the present status of the food and nutrition policy, analysis of the causes and actions to be undertaken to successful implementation of the policy. The differences of opinion of the respondents have been assessed and analyzed at the time of the study. The results of the study have been critically examined. The conclusion and recommendations have been made to reformulate or update the existing policy guidelines to make it more effective, useful and suitably implementable.

3.2 SELECTION OF COUNTRIES WITH SUCCESSFUL FOOD AND NUTRITION POLICY

The researcher aimed that the national food and nutrition policy of Bangladesh would be compared with the successful national food and nutrition policies of few developed and developing countries. Initially information on the national food and nutrition policies of different countries, which have proven their excellence through experience in successful formulation, implementation and

evaluation of their respective national food and nutrition policy, have been collected. The developed and developing countries were identified according to the following criteria:

Using the Selected World Development Indicators, the developed and developing countries were differentiated. According to the World Bank's current operational guidelines, the GNP per capita cutoff levels are used to classify developed and developing countries. The developed countries are those having GNP per capita, US$ 9361 and above (high income) and the developing countries are those having GNP per capita, US$ 9360 and less (low and middle- income) (117).

A total of six countries, three from each of developed and developing nations have been chosen for which literature was available for review, or having nutrition characteristics similar to Bangladesh. The nations selected from the developed countries, which have formulated successful food and nutrition policy for the healthy lifestyle of the population, are those of United States of America, Australia and Norway. Similarly, the national food and nutrition policies of India, Philippines and Thailand have been selected from developing countries.

A critical review of chronological events on nutrition happened in the country, the food and nutrition policy formulation, implementation and the progress of these countries are described and analyzed.

3.3 COLLECTION OF INFORMATION AND DATA

Both literature search and qualitative methods were used for information and data collection. The information collection process include the following methods:

3.3.1 Literature Search

A good number of documents, books, publications and scientific papers on food and nutrition policy of many developed and developing countries have been collected by library search, MedLine and PopLine search, electronic media, personal communications etc. from home and abroad. The available study findings

of different researchers on the formulation, implementation and progress of the national food and nutrition policies of the selected countries were also reviewed and analyzed.

These documents and secondary data were used to verify the factual statements and compared the experiences of formulation, implementation and progress of these developed and developing nations' policies with the national food and nutrition policy of Bangladesh.

Since there were differences of data and information on many nutritional development indicators in the country, the researcher used the data for comparison among the selected countries, published by the World Bank and the UNICEF in the United Nations documents.

3.3.2 Qualitative Method

Rapid Appraisal technique was used to collect key information on the importance of the policy; strength, weakness, opportunity and threats of the policy; suitability of implementation, success factors and suggestions to fill up the gaps, if any, of the national food and nutrition policy of Bangladesh which included the following three steps:

3.3.2.1 Observation

At first, the office of the policy formulator and policy-keeper (i.e. Bangladesh National Nutrition Council) and other nutrition concerned sectors (Ministries, Divisions and NGO Affairs Bureau) visited and observed through checklist technique (Appendix- I).

3.3.2.2 In-depth Interview of the Key Informants

A semi-structured interview guide was designed for interviewing Key informants (Appendix- II).

Qualitative approach was used to obtain information from the Key Informants. Verification and analysis of the information on national food and nutrition policy of Bangladesh was obtained from 40 senior officials, who were identified as key-informants, with semi-structured interview guide.

Nutrition is multidisciplinary and involves a good number of stakeholders in national food and nutrition policy formulation, implementation, monitoring, evaluation and reformulation. The Key Informants were mainly high-ranking authorities from government, autonomous, non-government and private organizations, including the policy experts, members of the Bangladesh National Nutrition Council, development partners, policy implementers, academicians, and conscious beneficiaries of the policy.

The researcher collected names of Key Informants, from different sectors concerned with nutrition (such as, health, agriculture, food, education, fisheries and livestock, social welfare, women and children affairs, local government and rural development, information, relief and disaster management, planning, finance, NGOs, private sectors, etc.), according to the following four broad categories: (i) policy-makers, (ii) Policy-implementers, (iii) academicians, and (iv) conscious and interested policy-beneficiaries.

Fifteen Key Informants were selected by simple random sampling from the lists of each category. Chronologically 10 Key Informants, from the selected 15 respondents of each category, who agreed to provide information according to the interview guide prepared for this study, were interviewed by making pre-appointments.

The researcher himself was the interviewer of the study, who has gathered practical experience in qualitative research during obtaining the degree of Master of Community Nutrition (MCN) from the University of Queensland, Australia in 1995-96 and conducting qualitative study as the Principal Investigator under BINP-operation research project coordinated by ICDDR'B.

Among the Key Informants, who were interviewed, 14 were from different sectors of the Government (including one Cabinet Minister), 7 from autonomous organizations, 8 from NGOs, 6 were from private sectors, and 5 from donors.

The total duration of the in-depth interview was more than 90 hours, in which duration of interview of each respondent varies from one and half hour to three hours. The data including general information on the importance of the

policy; strengths, weaknesses, opportunities and threats of the policy; suitability of implementation, success factors and suggestions to fill up the gaps, if any, in the policy through updating was obtained.

The researcher using the semi-structured interview guide and a micro tape recorder collected the information and data through in-depth interview of the Key Informants. Comparing between Key Informants data and focus group discussions standardized the information and data collected.

3.3.2.3 Focus Group Discussion

Six focus group discussions (four discussion sessions with 7 persons in each group and two discussion sessions with 8 persons in each group) were held separately with a total of 44 participants, who have authority in food and nutrition policy formulation, implementation, monitoring and evaluation and who are conscious beneficiaries. The participants of each group discussion session were from different categories. General information on the importance of the policy; strengths, weaknesses, opportunities and threats of the policy was obtained. Besides, expectation from the food and nutrition policy, its effective implementation through plans and programs, barriers in implementation, required possible changes in the policy, etc. were also obtained. The guideline that formed the basis for gathering this information has shown in Appendix-III.

Among the focus group participants, 17 were from different sectors of the Government, 8 from autonomous organizations, 9 from NGOs, 7 were from private sectors, and 3 from donors. More than 100 man-hours (varies from 2 to 3 hours per group) were used to obtain information through focus group discussions.

The researcher using the semi-structured interview guide and a micro tape recorder collected the information and data. These data and information are found very useful to analyze and compare with the available information found from the literature search and in-depth interview.

3.3.2.4 Transcription of the Information

The researcher transcribed the tape recordings of interviews of the Key-informants and focus groups.

3.4 ANALYSIS OF INFORMATION AND DATA

Information and data obtained from literature search and qualitative method, such as, in-depth interview of Key informants and focus group discussions, were analyzed for this study as follows:

3.4.1 Information Available from Literature Search

The collected information and data on food and nutrition policy formulation process, policy implementation and its progress with effectiveness in selected countries have been critically reviewed and summarized in tables to compare with the Bangladesh policy.

3.4.2 Qualitative Information and Data

The data from focus group discussion and in-depth interviews with Key Informants were used to complement the information gap in literature search and also used to cross check the information gathered from personal communications. The differences of opinion of the respondents have been assessed and analyzed at the time of the study. The results of the study have been critically examined through SWOT analysis (118).

In SWOT (Strengths-Weakness-Opportunities-Threats), the 'SW' components indicate internal environment, and the 'OT' components represent external environment (Figure-3.1). The components of **internal environments** (SW) are policy process, leadership, authority, complementarity, goals and objectives, i.e., the factors that influence the effectiveness* of the policy.

Figure- 3.1: SWOT: Four Strategies

Internal / External	Strengths	Weakness
Opportunities	**SO** Maxi-Maxi	**WO** Mini-Maxi
Threats	**ST** Maxi-Mini	**WT** Mini-Mini

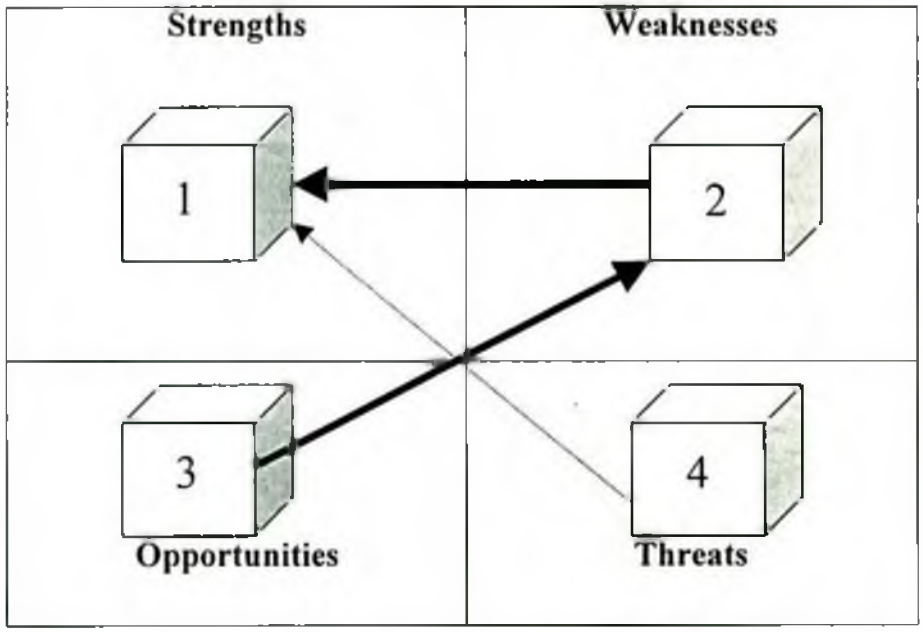
- Effectiveness refers to the extent to which a policy has made desired changes or has met its objectives through the delivery of services. However, efficiency refers to the extent to which a policy has used resources appropriately and completed activities in a timely manner.

The **external environment** (OT) constitutes the prevailing conditions that influence the development and implementation of the policy including awareness of the stakeholders, policy environment, scope, resources, trained manpower, tension between professional and political commitment.

In 'SWOT', the situation analysis shows the relationships among the critical variables. There are four alternative strategies: **SO:** Maxi-Maxi; **WO:** Mini-Maxi; **ST:** Maxi-Mini; **WT:** Mini-Mini.

The most desirable strategy would be the **SO** one, i.e., utilizing **strengths** to take advantage of **opportunities**. It would otherwise mean, as shown below, Minimizing **threats**, utilizing **opportunities**, to remove **weaknesses** and to improve upon the **strengths**. These inter-relationships among the SWOT components have been presented in Figure- 3.2.

Figure-3.2 : Inter-Relationship among SWOT components



Note: The process starts from cell 3 (opportunity). This (opportunity) can be utilized for removing weakness (cell 2). Weakness (cell 2) will strongly enhance the strengths (cell 1), resulting in little or no influence of threat (cell 4). It may also be noted that the darker lines (—————) indicate strong influence, while the indented lines (----------) indicate shaky influence.

The **criteria for evaluation of effectiveness of policy formulation and implementation** as described in section 1.4.6 has also been used to analyze the information. Both Halcrow (22) and Helsing (51) described the 'success' elements in policy development and implementation. The effectiveness and suitability of the national food and nutrition policy of Bangladesh has been analyzed with proper judgements considering those elements.

The conclusion and appropriate recommendations have been made according to the results and analysis of the data and information of the study and on the basis of data collected through literature and qualitative method.

3.5 LIMITATIONS OF THE STUDY

This is the first study specifically on food and nutrition policy in Bangladesh and probably in other neighboring countries. There is scarcity of study references on the national food and nutrition policy and its consequences and comparisons with other successful policies, particularly in the sub-continent.

Personal communications with the authors and researchers on different aspects of food and nutrition policy issues did not receive adequate importance, quick attention and reply in some cases.

Chapter 4

ANALYTICAL REVIEW OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

CHAPTER 4

ANALYTICAL REVIEW OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

This chapter is organized to analytically review the formulation process, implementation status, and progress achieved of the national food and nutrition policy of Bangladesh. The information on the processes described that were collected during qualitative approach, such as, observation, in-depth-interview and focus groups discussion have also been incorporated in the chapter.

The information on the importance, suitability and barriers of formulation and implementation of the national food and nutrition policy and other issues like identifying gaps and suggestions for improvement were collected from the Key Informants and focus group discussions, using the semi-structured interview guides and micro-cassette recorder. The information recorded in micro-cassette recorder was transcribed. Besides, role of disasters as a factor in determining access to food, food aid, role of stakeholders, and different nutrition programs in the country has also been described.

4.1 NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

In accordance with the decision of the World Food Conference in 1974 and mandate of the Bangladesh National Nutrition Council a nutrition policy and program for Bangladesh was prepared and approved by Bangladesh National Nutrition Council (BNNC) in 1983 and published in 1984 (11). The formulation of this document had taken about two years. With the representation of different sectors and stakeholders, BNNC had approved it with consensus and some modifications (119). But in the subsequent National Nutrition Council meeting it was stated that the nutrition policy and program of Bangladesh as approved in the previous meeting could not be considered as a Government document until the Cabinet approve it. However, this document could not be submitted in the Cabinet meeting for approval.

Still many sectors referred this document while preparing their plans and programs on nutrition and relevant fields in the country. Different allied sectoral policies and plans, such as agricultural policies, health policies, food policies, industrial policies, etc. consulted this document while reformulate or update their individual sectoral policies and plans. This document has been used as the first reference material during the formulation of the latest national food and nutrition policy of Bangladesh. The formulation process of the national food and nutrition policy of Bangladesh is described below.

4.2 POLICY FORMULATION PROCESS

The nutrition activities in the visible form started in this country since 1960s. Although a small sampled nutrition survey conducted in some parts of the country (in the undivided Bengal) in 1937, the nutrition situation of the people of the country was not satisfactory. However, nutrition surveys and sporadic nutrition activities had been conducted in this country considering the deteriorating situation of food intake as well as nutritional status during 1960s to 1990s. The chronological events that happened in the field of nutrition have been shown in Table 4.1.

The Standing Technical Committee (STC) of BNNC made a decision that the national food and nutrition policy of Bangladesh needs to be formulated depending on the nutrition situation of the country in early 1989 (120). Accordingly the latest national food and nutrition policy making process was started by BNNC in 1989, while the Chairman of BNNC, Professor M. A. Matin, the then Deputy Prime-Minister and Minister in charge of Health and Family Welfare took keen interest in policy formulation due its urgency and importance.

Similarly the Key Informants during in-depth interview and participants of the focus group discussions stated their realization about the importance of the policy. The Key Informants recognized importance of the national food and nutrition policy during in-depth interview by stating that "The policy is a guideline to improve the nutritional status of the whole population. It is instrumental to guide the nation and to

give future directions. It is essentially prerequisite to mitigate the nutritional problems".

Table-4.1: Chronological Events on Nutritional Activities in Bangladesh (1960-99)

Period	Nutrition Situation	Nutrition Services
1960s	Malnutrition was prevalent among the lower socioeconomic strata. Micronutrient problems were also prevalent.	The nutrition survey of 1962-64 depicted nutrition scenario of the country. Sporadic programs on nutrition was undertaken, particularly on nutrition education, awareness creation, applied nutrition programs, etc.
1970s-early	Chronic energy deficiency, anemia, vitamin A deficiency and iodine deficiency disorders identified. Energy and food intake deteriorated.	The malnutrition situation aggravates during the war of liberation. Nutrition interventions in the form of relief food materials were distributed among the distressed people. Special nutrition program in different areas and prophylaxis against anemia and vitamin A deficiency was undertaken.
Mid 1970s	Recognized that malnutrition is a serious problem in the country. Infection and under-nutrition were major causes of morbidity and mortality among infants and children.	The nutrition survey of 1974-75 showed gloomy picture of nutritional status and food intake. The BNNC and IPHN established for nutrition. Multisectoral indirect interventions were considered. Expanded program on immunization (EPI); Oral rehydration therapy (ORT) and other programs on nutrition promotion were taken.
1980s	Felt need for nutrition bias in every sectoral policies and programs Micronutrient malnutrition recognized as public health problem in the country.	Efforts for adoption of Nutrition Policy and Program of Bangladesh. Nutrition intervention projects, Programs on nutrition education and awareness were initiated. Vitamin A capsule distribution and Lipiodol injection campaign and Universal salt iodization for the control of IDD were initiated. Law on the BMS code of marketing enacted.
1990s	Recognized that malnutrition is an impediment to national development; its use as indicator of development process.	Approval of the National Food and Nutrition Policy; Finalization of the National Plan of Action on Nutrition; Implementation of BINP as pilot project and preparation of National Nutrition Program to cover the whole country by phasing.

Many of them said that "Food and nutrition policy is very important for a developing country like Bangladesh, where it is based on the assessment of the

situation as well as on the basis of the need for food security of the population. The policy guidelines are very necessary for regular guidance of food population ratio." Some of them stated that if there were an approved policy, the Government would be careful to implement it through plans and programs. A few Key Informants stated that recognition of the necessity of nutritional development in the country shows the country's vision, which needs to be implemented. They described that the country should not loose vision in the line of the world nutrition development.

While the focus group participants were of the opinion that nutrition situation had been declining since the first nutrition survey conducted in the country in 1962-64, and subsequent nutrition surveys in 1974-75 and 1981-82 showed further declining trends, but no appropriate nutrition programs have been undertaken. Therefore, policy guidelines were felt necessary for the improvement of nutritional status, they stated. The groups were expecting that the ministries would be able to improve the nutrition situation through their activities. It is important to report that many of the respondents (Key Informants and focus group participants) recognized the importance of the policy now as an environment of nutrition is prevailing in the country.

Three nutrition experts (12) in consultation with different sectors and members of the Standing Technical Committee (STC) of BNNC prepared a draft national food and nutrition policy. Then BNNC organized a "Workshop for Development of a National Food and Nutrition Policy" on 21 June 1989. All interested stakeholders attended the workshop with the representations of the Ministries of Health and Family Welfare, Agriculture, Fisheries and Livestock, Food, Education, Information, Social Welfare, Women and Child Affairs, Industries, Rural Development and Cooperatives, Environment and Forestry. The academicians from the universities and nutrition research institutes, rural development academies and representatives from different UN organizations, such as UNICEF, FAO, WHO and NGOs also participated. The participation all stakeholders from different nutrition relevant sectors were ensured.

The draft policy was presented in the workshop and reviewed thoroughly during group discussion sessions. Some modifications were suggested in the plenary. An Editorial Board, constituted by the participants of the workshop, incorporated the suggestions of the workshop in the policy. Discussions were held on the draft prepared by the Editorial Board in the meetings of the STC of BNNC and then it was placed in the Council meeting. A few members of BNNC opined that the written comments of the concerned Ministries on the policy were essential (119). Accordingly comments on the draft policy were collected from different sectors and stakeholders. The Ministry of Labor and Manpower even gave comments on the policy, they raised the question of their non-invitation in policy formulation meeting and also the working rights of the biddi workers, while discouragement of tobacco cultivation was proposed in the draft policy. Besides they also stated that tobacco farmers would be loosing their income. However, it was stated that the bidi workers were not happy with their profession and they are searching other sources of income and above all, health cost of smoking was much more than that so the policy guideline was appropriate. Some Key Informants during interview pointed out as threat of the policy that tobacco is a cash crop in the country and we are suggesting discouragement of its production, but the Tobacco Co. is so powerful globally, definitely it goes against them. Some of them have raised question of employment, foreign income etc. Among the Key Informants, the technical experts opined that the land used for tobacco cultivation might be used for pulses and oilseeds production, since there is a decreasing trend in production of pulses and oilseeds and their inadequate consumption. It is important to note that few development partners initially discouraged to formulate the policy at the point in time. They were of the opinion that some operation research on policy issues should be carried out first and then the policy may be formulated.

However, one of the members of the Standing Technical Committee volunteered to prepare a framework for the food and nutrition policy (121). He presented the policy framework in a STC meeting. In the mean time, two national

documents on nutritional assessment, analysis, and plan of action have been prepared as "The Nutrition Program and Action Plan in the 1990s" (122) in the light of the World Summit Declaration and the other as "The Bangladesh Country Paper for the ICN" (123). The draft national food and nutrition policy was further updated by incorporating the comments of different sectors and considering the recent developments in the field of nutrition by a consultant, who was also one of the three nutrition experts involved in initial policy drafting. The national food and nutrition policy was drafted in such a way that it is complimentary to the existing government policies in food, agriculture, fisheries, livestock, primary health care, education and other development areas.

In December 1992, an International Conference on Nutrition was held in Rome, which has made a declaration that each country will have to prepare their national plan of action for nutrition (NPAN) (124). Since Bangladesh has already drafted a national food and nutrition policy, the formulation of the NPAN become easier for the members of the national committee and sub-committees. The national committee and sub-committees also prepared the national plan of action for nutrition (71) and the Bangladesh country paper on nutrition (125).

Among the Key Informants who were involved in the policy formulation process stated that in spite of taking many efforts by the Standing Technical Committee (STC) and the Secretariat of BNNC, the Government could not approve the policy until September 1997. The irregular meetings of the BNNC were the cause of delay to approve it. Besides, it was also observed that the BNNC was reconstituted several times with the change of the Governments, particularly change in leadership of BNNC. Some of the Key Informants described that during the tenure of President H. M. Ershad, the First Lady Begum Rowshan Ershad became the Chairperson of BNNC. After the fall of the President, initially the Advisor to the President/ Minister for Health and Family Welfare became the President of BNNC. And after a few months the Council was again reconstituted with the then Prime Minister, Begum Khaleda Zia as the President of BNNC. No meetings of BNNC could be organized

during her time, they added. Again the Council was reconstituted with the Prime Minister Sheikh Hasina's leadership as its President.

The Nutrition Society of Bangladesh organized the 7th Bangladesh Nutrition Conference in March 1997, which was inaugurated by the Prime Minister. The Prime Minister, who is also the President of BNNC, in her speech of the Chief Guest, declared that the national food and nutrition policy of Bangladesh and the national plan of action for nutrition would be approved soon in the meeting of the Bangladesh National Nutrition Council (126). The policy and the NPAN were approved in the meeting of the council held on 1 June 1997. The policy was finally approved in the Cabinet meeting held on 15 September 1997 (13).

4.2.1 Multisectoral Approach in Policy Formulation

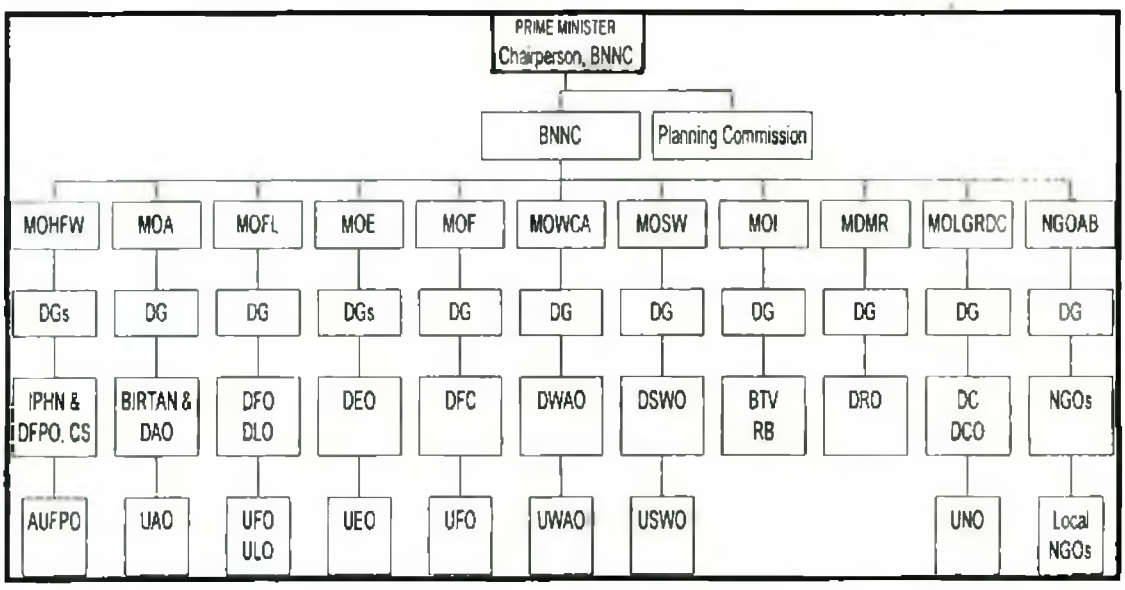
Nutrition is multisectoral. The BNNC very generously involved the partners in nutrition development during the policy formulation process. All sectors that are working for improvement of nutrition either directly or indirectly were invited to participate in the formulation process at any stage. The multisectoral nature of the national food and nutrition policy formulation and implementation process and of its different stakeholders in Bangladesh are shown in Figure-4.1

The figure clearly demonstrates that a number of ministries are involved in nutrition improvement activities either directly or indirectly. Most of these ministries were involved in policy formulation process and now actively involved in policy implementation process.

In Bangladesh, the stakeholders to improve the nutritional status of the population have implemented a number of nutrition programs in various sectors. Many of the stakeholders who have participated in national food and nutrition policy formulation process have either direct or indirect nutrition projects that are assisting nutritional improvements in the country. Important nutrition and nutrition related activities of a few important stakeholders are described below:

Ministry of Health and Family Welfare is responsible for prevention and control of diseases through providing curative and preventive health services to the country population. This ministry is the lead ministry for nutrition in Bangladesh.

Figure-4.1: National Food and Nutrition Policy Formulation and Implementation Process in Bangladesh at Different Levels



BNNC: Bangladesh National Nutrition Council; MOHFW: Ministry of Health and Family Welfare; MOA: Ministry of Agriculture; MOFL: Ministry of Fisheries and Livestock; MOE: Ministry of Education; MOF: Ministry of Food; MOWCA: Ministry of Women and Children Affairs; MOSW: Ministry of Social Welfare; MOI: Ministry of Information; MDMR: Ministry of Disaster Management and Relief; MOLGRDC: Ministry of Local Government, Rural Development and Cooperatives; NGOAB: Non-Government Organization Affairs Bureau; DG: Director General; IPHN: Institute of Public Health Nutrition; DFPO: District Family Planning Officer; CS: Civil Surgeon; BIRTAN: Bangladesh Institute of Research and Training on Applied Nutrition; DAO: District Agriculture Officer; DFO: District Fishery Officer; DLO: District Livestock Officer; DEO: District Education Officer; DFC: District Food Controller; DWAO: District Women Affairs Officer; DSWO: District Social Welfare Officer; BTV: Bangladesh Television; RB: Radio Bangladesh; DRO: District Relief Officer; DC: Deputy Commissioner; DCO: District Cooperative Officer; NGOs: Non-Government Organizations; AUFPO: Assistant Upazilla Family Planning Officer; UAO: Upazilla Agriculture Officer; UFO: Upazilla Fisheries Officer; ULO: Upazilla Livestock Officer; UEO: Upazilla Education Officer; UFO: Upazilla Food Officer; UWAO: Upazilla Women Affairs Officer; USWO: Upazilla Social Welfare Officer; UNO: Upazilla Nirbahee Officer.

Nutrition and nutrition related projects currently being implemented by the Ministry of Health and Family Welfare are as follows:

- National Nutrition Program (NNP) has been started recently.

- Bangladesh Integrated Nutrition Project (BINP) was launched in 1995, which showed remarkable success in reducing severe malnutrition in the community.
- Vitamin A capsule distribution program with a good coverage.
- Lipiodol injection to 3.2 million of 3.7 million target population.
- Health and Population Sector Program, which has essential service package (ESP) with nutrition intervention.
- Countrywide observation of National Nutrition Week by BNNC.
- Countrywide campaign for protection, promotion and support of breastfeeding by BBF.
- Development of growth monitoring chart and growth monitoring in MCH and FP centers.
- Distribution of iron and folic acid tablets.
- Nutrition education in the MCH and FP centers.

Ministry of Agriculture has been engaged on crop production and employment generation in agriculture sector. The on-going programs on nutritional improvement being implemented by this sector are as follows:

- Research and field activities such as homestead gardening, crop diversification, i.e. pulses, oilseeds, winter crops, etc.
- Horticulture development which include fruits, nutrient rich vegetables; training to marginal farmers, agriculture workers, cooperatives and technical staff.
- Information Resource Center at BARC.
- Research and Extension activities to homestead vegetable production.

The Ministry of Food is responsible for distribution and management of food items throughout the country. Among the on-going nutrition related activities, the Ministry is implementing Food-for-Work Program and Open Market Sales (OMS) program, which has significant impact on ensuring food security of the vulnerable households.

Ministry of Fisheries and Livestock has undertaken different important programs for increased production of new breeds of fish, poultry and livestock.

The Ministry of Women and Children Affairs is implementing the following nutrition relevant programs for the improvement of nutritional status of women and children.

- Agriculture based rural development programs,
- Nutrition awareness raising program,
- Family health care program,
- Day care services for children of working women, mid day meal for working women, and
- Income generation programs

Ministry of Social Welfare has undertaken comprehensive program on Women's Organization and participation on working children, health nutrition program, and growth monitoring and income generation projects.

Ministry of Education has incorporated nutrition in its Primary and Secondary courses curriculum. **Department of Primary and Mass education** through its Food-for-Education and Non-formal Education Program is involved in nutrition related activities.

Ministry of Disaster Management and Relief ensures adequate food and other live saving materials to disaster victims. The Ministry is implementing Vulnerable Group Development (VGD) Program, which provides food aid to distressed rural women.

Ministry of Information is creating nutrition awareness through the Bangladesh Television and Bangladesh Betar (Radio). Bangladesh Television is committed to at least 750 minutes per month to raise awareness on nutrition and health. Bangladesh Betar (radio) has also a daily program on agriculture information and production. They also have health, family planning and nutrition programs.

Ministry of Local Government and Co-operatives has nutrition-related programs like, nutrition training to the members of women cooperatives through Bangladesh Rural development Board, nutrition awareness program, health and nutrition programs of Rural Development Academies at Comilla and Bogra.

Many focus group discussants were of the opinion that the policy formulation process involved almost all concerned sectors, such as, ministries, organizations and agencies, through consensus building mechanism. This would certainly make responsible of all participated organizations or at least the persons who were involved in the process. These opinions are almost similar to that of the opinions stated by many of the Key Informants during in depth interview.

Issues of Agreement and Tension in Policy Endorsement

The involvement of these multisectoral stakeholders in the policy formulation process from the very beginning has created a good environment and understanding among them. Since policy formulation process continued for longer period, the weak bondage among the stakeholders became stronger, particularly in decision making. There were some central issues of agreement and of tension in the process towards the policy endorsement.

***The issues of agreement include*:**

- All stakeholders should endorse that nutritional improvement is the constitutional and human right and it is not only a developmental issue;
- The policy builds on the stakeholders' contribution and they have the ownership and responsibility of its implementation;
- The continuity of the political commitment and sectoral responsibility towards the nutritional improvement was a necessity of the policy environment;
- The individuality of different sectoral nutrition and related policy guidelines needs to be consolidated under four major sectoral guidelines

and to implement those guidelines through a coordinated approach, if needed; and

- The central consensus agreement of the stakeholders on the strategy for effective implementation of the policy guidelines.

A good number of focus group participants opined that it is the good intention of the government to consider nutritional improvement not only as a developmental issue but also as human right. They stated that nutrition is the constitutional right of the people and the Cabinet Members (Ministers) are mentioning it in different forums. The nutritional improvement is also the constitutional and human right. It is not a developmental issue only, as considered earlier. Some of them also stated "It is not the kindness of any Government or donors." The stakeholders rightly agreed to change nutrition from the developmental issue to the right issue and to reflect nutrition as human right in their plans and on-going programs during policy formulation. Since the policy is the fruits of continuous formulation process of making decisions on different issues raised by the stakeholders, their contribution and ownership of the policy as well as responsibility of its implementation was agreed upon. Besides, the continuity of the political commitment and sectoral responsibility towards the nutritional improvement is a necessity for the success of the policy was agreed, the respondents stated. All these issues were endorsed during the policy process and agreed upon by the stakeholders of different sectors. The Key Informants clearly opined that the consolidation of many different sectoral guidelines in to only four major sectors was possible due to continuous dialogue on different draft guidelines among the sectoral representatives. The intersectoral coordination of nutrition activities would be useful during policy implementation.

The issues of tensions include:

- Conflicts between the technical people and bureaucrats;

- Lack of adequate knowledge on the contents of the policy;
- Continuity of political commitment;
- Possibility of sectoral disagreements; and
- Inadequacy of resources.

The delay of policy formulation was happened due to conflicts among the technical experts, bureaucrats and the policy makers and regular incorporation or updating of information and comments of the different sectors into the policy. There were many scopes for discussions, comments, conflicts and consensus of the stakeholders on the draft national nutrition policy until its approval.

Even during the final approval of the policy there were conflicts about targeting of the policy. Technical experts stated that targeting should be measurable, the bureaucrats said it should be feasible to achieve otherwise it is useless, while the political leaders stated that it should be a bit ambitious otherwise we could not progress. However, the question of targeting was resolved through consensus discussions.

The Minister for Agriculture and Food informed in the policy approval meeting of the BNNC that food production has substantially increased. She proposed that importers should be discouraged to import foods and may be allowed to import food if the stock is less than 7 lakh tons (although proposed 8 lakh tons in the draft policy), which was agreed. The strategies of the policy to make a firm social, economical and political commitment to achieve the objective of promoting the nutritional well-being of all its people as an integral part of its short and long term development policies, plans and programs were agreed.

Lack of adequate knowledge of the policy makers, senior government and non-government officials, and development partners about the contents of the policy created lot of tense in the meeting. Sometimes they have preconceived ideas and they want to exert those ideas to accept by everybody. For example, although it was resolved earlier, again question raised about the title of the policy in the meeting.

Why it is "food and nutrition policy", since there is a separate policy for food. Why not it is "agriculture and nutrition policy" or "health and nutrition policy." A senior bureaucrat proposed that title of the policy should be "national nutrition policy". It was settled in the meeting after threadbare discussion, when the executive of the food ministry informed that they are not opposing the title, since nutrition comes from food and thus the name is appropriate. Ignorance always create problems, even among the few focus group participants, who did not participate in policy formulation process, they said there is food policy, agriculture policy and other government policies. Then why the title of the policy is 'Bangladesh national food and nutrition policy' and since there is a separate food policy of the government, why it is not only national nutrition policy? It was opined by three of the participants that it has been resolved and it is not a new issue. They explained that mandate of the Bangladesh National Nutrition Council is to formulate national food and nutrition policy and the FAO manual on food and nutrition policy formulation guidelines described the reason of naming of it. Nutrition is always considered as medical aspect, which submerge food aspects but nutrition comes from foods and nutrition without food does not makes sense, they said. Accordingly the title is decided after long debate. Some of them said that naming of the policy depends on the domination of the sector. Most of the nations in the world who have formulated the policy, named as national food and nutrition policy, while India named it as national nutrition policy. This national food and nutrition policy of Bangladesh has been approved in a meeting where the Ministry of Food gave the concurrence. Therefore, the policy has the overall consensus, few participants added. It was also informed that the food policy of the government is being renamed as food security policy in conformity with the national food and nutrition policy and its formulation process has been started.

The Informants also stated that ignorance of the development partners, policy makers, bureaucrats, Government and non-government officials, program managers, community leaders and even the farmers about the contents of the policy

might be a threat of implementation of the policy in future. They suggested propagation of the contents of the policy to all concerned and general public.

Continuity of political commitments and interest to the improvement of nutritional status of the population is important. Some of the focus group participants stated that changes of political parties in the government might discontinue political commitments, which may affect policy implementation. Introduction of every new thing faces challenges and there are position and oppositions, beneficiaries and victims, and also vested interest groups.

They stated that the policy generally implemented through plans and programs; and sometimes it requires legislative measures. Whenever an Act or Ordinance or Regulations are formulated for the benefit of the majority people and the country, some industries, companies or farms are sufferers to achieve their vested targets, so their activities became as threat. The focus group participants cited examples that the Act on Iodization of Edible Salts could not satisfy all salt crushers. Many of them are not producing iodized salts, although they have received Salt Iodization Plants and Potassium Iodates at free of cost from UNICEF through Bangladesh Small and Cottage Industries Corporation. They added that the owners of these factories, through their association, are burgaining with the Government for providing them licenses for importation of non-iodized salts, so that they can earn more money by both importing and iodizing and for many other benefits. Some of the participants also informed that two breastmilk substitute companies have to face the judiciary court in Bangladesh and received penalty for acting against the law. While two discussants opined that laws are not always effective to implement policy decisions. They suggested that threats of any policy could be removed by appropriate actions, like regular motivation, dialogue and discussions.

The focus group members identified ignorance of the policy makers, bureaucrats, decision makers and all concerned including donors about the contents of the policy and even the Acts or Laws some times be the threats for suitable

implementation. One of them cited that once the Ministry of Commerce imported non-iodized salt in the country because of ignorance, although the existing law does not permit it. Besides, a few of them identified conflicts among the professional disciplines, like doctors, non-doctors, biochemists, agriculturists, bureaucrats, etc. about the leadership as possible threats.

While the researcher requested to cite an example of potential threat that has been resolved in the country, one Key Informant described his experience in a meeting with the President H. M. Ershad. One of the vice-chancellors, opposed universal iodization of salts in Bangladesh, by saying, "Sir, I have no goiter, you have no goiter, then why should we consume iodized salt? It should not be mandatory." Some of the participants of the meeting supported the vice-chancellor. He (the Key Informants) presented documentary evidences in favor of universal iodization of salt in the meeting and when he informed that many countries of the world have enacted laws on universal salt iodization, the President immediately agreed and decided that salt iodization should be universal in the country. This proved the commitment of the Informant and the President towards elimination of IDD.

During in-depth interview, the majority of the Key Informants stated that "all sectors cooperated in formulation of the policy and their concurrence was obtained through confidence and sharing of commitments. It is a multisectoral document". Most of them informed that "the policy has covered the sectoral aspects adequately. Food security, health and caring practices have been taken well care of in the policy". They also stated clearly that "all sectoral issues concerned with nutrition with the concurrence of stakeholders have been included in the policy is the major strength of it." They added "the strength of the policy has been proved through the preparation and approval of the multisectoral national plan of action for nutrition, implementation of Bangladesh Integrated Nutrition Project and subsequent preparation of the National Nutrition program with multisectoral participation". Few Key Informants informed that policy strengths depend on integration of all efforts

and inclusion of public and private sectors' efforts, the national food and nutrition policy of Bangladesh has own it.

The focus group participants endorsed with consensus that the policy has lot of strengths, as it was formulated by multisectoral approach, all sectors involved and covered almost every sectors having clear directives. They also informed that although the national food and nutrition policy was drafted in 1989, but it could not be approved in time. They added that they are fortunate to become successful while the present government has approved the policy in the meetings of the BNNC and the Cabinet. During observation it was seen that the Government has published sufficient copies of the policy document and distributed by BNNC to all concerned stakeholders, government and non-government organizations for implementation.

They added that the national food and nutrition policy must enjoy widespread support at all levels of the government starting from the lower position to the topmost. In Bangladesh context, the policy makers through a set of processes adopted the policies.

The Key Informants informed that the policy was primarily drafted by a group of interested people and thoroughly examined by political leaders, professional experts, secretaries of concerned ministries, and senior most officials of the government departments and relevant non-government organizations in the BNNC (policy keeping body) meetings.

The national food and nutrition policy formulation and adoption through a multisectoral approach was quite difficult and time consuming. The Key Informants and the focus group participants reaffirmed that the formulation of the Bangladesh policy took longer time because of many reasons like, differences of opinions, lack of consensus on various issues and also lack of commitment of the policy makers in the country. Frequent changes in sectoral top positions, their knowledge and attitude to nutritional improvements, and opinion leader's disagreement on certain issues delayed the process. They also added that among other causes, the meetings of the BNNC could not be held regularly as the council was reconstituted four times in

seven years and the very busy schedule of the Chairperson of the Council were important factors. In fact the Secretariat and the STC of BNNC was instrumental to formulate the national food and nutrition policy during the period of irregularity of Council meetings.

A few of the Informants from policy implementers' category stated that although the policy is important for the country but they were not involved during policy formulation. They explained the reason of non-involvement may be their non-availability in the present position or they were ignored. One of the Informants from the development partners said that the policy guides us and gives us direction where to go and how to go. It has the strategy and sectoral terms of references for nutritional activities in a broader sense with flexibility. All Informants agreed that it is no doubt an important and useful document.

The Goals and Objectives of the Policy

The policy goals and objectives differ from country to country. The main goal of the national food and nutrition policy of Bangladesh (1997) is an attempt to significantly improve the nutritional status of the people, particularly vulnerable groups including the elderly and thereby contribute to the improvement of the quality of life in the socioeconomic development (13).

The present food and nutrition policy has seven major objectives. These objectives are:

- To increase production and availability of both staple and non-staple nutritious food, minimize post-harvest losses, develop food preservation and distribution technologies at home and industrial level. To maximize availability of food for national consumption in normal times, in times disaster and also for export, when possible.
- To improve health and nutritional status of the people, especially of children, women (adolescent girls, expectant and nursing mothers), and elderly.

- To consider the importance of the family unit to provide adequate physical, mental, emotional and social needs of children and other vulnerable groups including the elderly; and strengthen family unit as a basic unit of the society.
- To ensure safe drinking water, arrange for proper disposal of waste, improve sanitation and environmental hygiene at personal and community level.
- To provide formal and non-formal nutrition education to the people especially women and children.
- To undertake all possible measures to increase income generating activities for poverty alleviation particularly for women in rural households.
- To develop action plan with time frame to implement the policy (13).

The Key Informants discussed the goals and objectives. A few of them stated that the policy has a very ambitious goal, but the country has very little trained manpower and expertise in nutrition, which may be a threat during implementation. But other Key Informants and focus group participants did not consider the goals and objectives so ambitious. More than half of the focus group participants informed that the policy has wider coverage with crystal clear directives and broader guiding framework of all sectoral guidelines. The policy goals and objectives are broad and achievable. The major strategies are elaborated. Besides, they stated that this policy is not making any obstacle to the preparation of any nutrition plans and programs for national development. Most of them informed that the policy has covered sufficiently all-sectoral aspects. Food security, health and caring practice; the three main issues for nutritional achievements have been focused in the policy. Income generation and community participation has been covered in the policy, which are now very essentially considered in every policy of the Government.

nutrition policy. The Informants added that the food and nutrition policy should be periodically reviewed and recommended revisions of it according to the needs of the country.

The policy is not static and it is changed according to the need of the people. One of the Key Informants said that the policy did not mention the relationship between the ecological zones and nutritional availability. There is no mention of necessity of nutritional mapping in the policy and specific guidelines on it. There are some soils in stress areas, which are deficient in nutrients, particularly in Zinc, Sulfur, Iodine, Manganese, Magnesium, Cobalt, etc. which has good relationship with nutrient availability in plants and ultimately to animals and human. Soil stresses are known as plant-animal-human syndrome, which is important for nutritional considerations, but these are not mentioned in the document. Researches on nutrition, particularly biological availability of nutrients are not encouraged and resources for it are scarce in the country. It deserves prominence in the policy, because depending on the results of researches the policy might be changed. Few Informants stated that proper monitoring of the food safety acts and drugs policy is not done and perhaps the same is happened for nutrition policy. Many other issues have been raised by other Informants to include in the policy. However, before any further discussion, the policy implementation process has been described below:

4.3 POLICY IMPLEMENTATION PROCESS

The national food and nutrition policy is implemented through the multisectoral participation. Majority of the Key Informants and focus group participants stated that although many of the policy guidelines have been implemented in the country through different sectoral plans and programs before the approval of the food and nutrition policy in Bangladesh in 1997, but its approval gave new momentum to the individual sectors.

The focus group participants stated that "Since the government adopted the national food and nutrition policy, we are now thinking how successfully and

efficiently it can be implemented. The coordination of the nutritional activities is important and BNNC has certain role to play." The Key Informants identified a number of factors responsible for successful implementation of the policy. First of all, the peoples' awareness about the contents of the policy is important factor. Many of them also given importance on involvement of everyone concerned with nutrition in regular dialogue for consensus building and decision-making on nutrition issues. Translation of the commitments into action (NFNP to NPAN to program and activities) and regular monitoring of the policy activities are factors for the successful implementation of the policy. The focus group discussants also stated that the policy has been reflected in NPAN, 5th Five Year Plan and different sectoral programs and projects. Besides, the concurrence of the stakeholders during its formulation and approval gave them ownership as well as make them responsible of the policy, which is also a major strength of it. Besides, the participants opined that since the policy is named as national food and nutrition policy, enough stress has been given to food production, food availability, food marketing and distribution, etc which are the strengths of the policy. The strengths of the policy need to be used during appropriate implementation of it, they added.

The national food and nutrition policy of Bangladesh included a general and few sectoral strategies to implement the policy. The general strategies are being implemented at the central level and the sectoral strategies are being implemented by four major sectors, such as, (i) agriculture, food, fisheries, livestock and forest; (ii) health, family welfare and environment; (iii) nutrition education and communication and (iv) community development and social welfare.

- The responsibilities of ***agriculture, food, fisheries, livestock and forest sector*** are to increase food production from nutritional point of view to meet the requirement of the increasing population, rational use of land and water resources, fertilizer, pesticide etc. increase of production base for self-sustaining growth of staple foods (rice, wheat, potato and sweet potato) and non-staple foods (pulses, oilseeds, soybean, fruits, vegetables, fish, meat and poultry).

- The responsibilities of ***health and family welfare sector*** included reduction of maternal, neonatal and child mortality and morbidity, prevention and treatment of nutritional deficiency disorders (IDD, night blindness and nutritional anemia) and nutrition related non-communicable diseases, such as, cardiovascular diseases, diabetes, cirrhosis, and gastric and duodenal ulcers, encouragement for exclusive breast feeding (including colostrum) and enforcement of Breast Milk Substitute Act of 1984.
- The ***education and communication sector's*** responsibility included as to provide formal and non-formal nutrition education to all people about the requirement of nutritious food for the vulnerable groups particularly children, pregnant and nursing mothers, educate family decision makers to change the method of food distribution in the family and food habits, disseminate nutrition information to all people through mass communication media and train a contingent of nutrition workers on nutrition to teach others.
- The ***community development and social welfare sector*** is to support diversification of rural economy, promote investment in human resources development and make appropriate technology available to provide integrated production and employment.

4.3.1 Policy Implementation Status by the Strategic Sectors

The status of implementation of the national food and nutrition policy by the specified four major sectors was assessed by in-depth interview and focus group discussions. A few Key Informants stated that there is no mention of effective and specific policy implementation strategy in the document. They said that "the policy should be more multidisciplinary but integrated." The policy implementation strategies were followed and implementing the policy guidelines has made some achievements, but some of the policy guidelines are yet to be implemented. The implementation status is described below:

A. Among the policy guidelines for ***food, agriculture, fisheries, livestock and forestry sector*** the following guidelines have been implementing successfully through the existing plans and ongoing programs:

- There is a need to increase cropping intensity and productivity to meet the energy requirement of the population. Recently we have a bumper production of cereals, particularly rice in the country. The focus group participants said that "many of the guidelines have been implemented, such as, food production, particularly rice has been substantially increased; vegetables and fruits production are also increased; national nutrition week has been observed to create awareness of the population; etc." Some of the Key Informants opined that "more production of rice and wheat gradually reduces fish production, strategy for nutrient balance would be necessary." The farmers generally want more production and more profit out of them, and if they have less income from one crop they are discouraged to produce it in the next year. Because of that growing of non-staple foods are not courageous to the farmers without incentives.
- Intensification of the process of crop diversification has been implemented to make available more energy and protein foods at low cost. This guideline has been included in the NPAN and the national Development plan. The Agricultural Extension Department of the Ministry of Agriculture is encouraging the production of maize, sorghum, millets, etc. to the farmers through its development project and regular activities of the Block Supervisors at the Union level (local unit). The increased production and consumption of soybean has also been promoted to the farmers, the informants reported. A few focus group participants informed that "the Ministry of Agriculture has the major target of production, but they have no vision to convert production in to consumption and finally, transformed consumption in to nutrition." Dissemination of knowledge of nutrition among the extension workers and the farmers will certainly help to achieve the vision.

- Production and use of organic fertilizer is propagating among the farmers in different districts of the country. Their importances in agricultural systems that promote environmentally, socially and economically sound production of foods are being disseminated. Few Key informants informed that increasing production of food, rice in particular and irrational use of fertilizer, insecticides and pesticides for growing food crops has diminished production of foods. Focus group participants also have the same opinion.
- Sufficient stocks of food through local procurement and import to meet emergency requirement have been maintained continuously. The success of implementation of this policy guideline is the proper decision of food distribution among the victims of 1998 floods. During the 1998 flood the available foods were distributed among the victims, the allotment was reduced to 16 kgs of foodgrain (Only 8 kgs of rice and 8 kgs of wheat) per VGD cardholders for October only. The Minister of Agriculture and Food informed that this allocation was decided as a policy issue during such devastating flood ignoring the pressure of the donor community, postponing decision on November distribution until more definite information on food aid arrivals was available and thus saves lot of life.
- Homestead gardening is promoted in the country for the production and consumption of colored fruits and vegetables rich in carotene and vitamin C. Increase in production and consumption of the vegetables and fruits are encouraging. The Key Informants stated that home gardening is a social movement and Ministry of Agriculture is promoting home gardening seriously. The rural poor approach by home gardening would be excellent for food security, they added. The Key Informants and focus group participants opined that more vegetable and fruits production and consumption would be necessary and inter-sectoral programs through the BINP or NNP might be helpful to the target groups.

- The production and consumption of fish, poultry and livestock has been increased by proper planning according to the policy and NPAN in the country. The Key Informants and focus group participants suggested for a coordinated approach for their adequate production and consumption.

But the following policy guidelines of the food, agriculture, fisheries, livestock and forestry sector have not yet been properly implemented, but some actions for their implementation have been taken:

- Marginal lands, khas lands, road side areas, river banks and other cultivable lands for raising animal fodder and nutrient rich multipurpose trees along with the increase of animal feed are not adequately earmarked and distributed for the purposes. These lands are now surveyed and expected to be leased out to the landless poor people through their cooperatives.
- Land used for tobacco cultivation are not reclaimed for the production of non-cereal foods like, pulses and oilseeds. Loan for tobacco production has not yet been stopped and no alternative incentives for food production have been ensured.

B. There are number of important policy guidelines for ***health, family welfare and environment sector***. Among those the following guidelines have been implementing successfully through the existing plans and ongoing programs:

- Health service delivery system with respect to organizational structure, deployment, training and management has been strengthened. The nutrition component in the primary health care system is being handled at the grass root level through essential service packages. The Informants stated that the health infrastructures have been expanded up to the Union level (small unit of the sub-district/Upazilla). A rural health center (Community Clinic) is being established for each of the 6000 population in rural areas covering the whole country. The Ministry of Health and Family Welfare has started implementation of health and population sector program (HPSP) for improved health service delivery systems.

- Efforts have been made to meet the special needs of vulnerable groups (infants, young children, and women, especially during pregnancy and lactation) and to reduce maternal, neonatal, child mortality and morbidity. Special attention to the pregnant and lactating women for their increased requirement for protein, calcium, iron and vitamins A and D in their daily diets are being successfully ensured. Caring practices for children under three, adolescent girls, pregnant and lactating women, and medical care for the elderly are being implemented. The Informants said that the Bangladesh Integrated Nutrition Project and other health components of the HPSP (such as immunization, VAC distribution, ESP, etc.) are providing services to implement the guideline. The success of BINP in these areas is replicated through NNP covering the whole country by phasing, they added. The Informants stated that the BNNC observed National Nutrition Weeks of 1998, 1999 and 2000 on the themes of "Better Nutrition for Healthy Nation", "Maternal Nutrition Builds Healthy Nation" and "Adolescent Nutrition" respectively throughout the country up to the grass root level providing appropriate importance. The observance of Nutrition Week has made tremendous impact on nutritional improvement (127).
- Importance of exclusive breastfeeding (including colostrum) for all infants for the first five months, giving home made weaning foods and continue breastfeeding to all children from 6 to 24 months and stress on child spacing effect of lactation for 24 months. Many of the Key Informants opined that Bangladesh has the breastfeeding environment, World Breastfeeding Week has been observed throughout the country for several years from 1-7 August and the theme of the year as well as importance of breastfeeding has been disseminated by the Bangladesh Breastfeeding Foundation (BBF), which has tremendous impact. Besides, Baby-friendly hospital initiatives (BFHI) have been undertaken and at least 200 national and district level hospitals have been qualified as baby friendly. The amended BMS Act (No. 16) of 1990 has been enforced. In order to take legal action against the violators of BMS code- a lawyer is appointed. Four cases have

been filed out of which BBF has own three cases and the last one case is pending in the court (128). All these activities are possible in the country due to an well-organized group of people who are motivated to the right cause of promotion, protection and support of breastfeeding and continued their efforts since 1989. They are working under a non-government organization with the support of the Government.

- Plans and programs have been undertaken to reduce micronutrient malnutrition. The main problem of vitamin A deficiency, Iodine deficiency disorders and Iron deficiency anemia are seriously considered by this sector. The Key Informants stated that "earlier vitamin A deficiency was considered as a public health problem (as the prevalence was > 1.0 %) when the VAC distribution coverage was only 35%. But recently the coverage exceeds 80% and thus resulting to the prevalence of only 0.66 %, which indicates that it is not a public problem now." Besides, they informed that the universal salt iodization program has shown impressive results. The prevalence of goiter rate has been reduced from 47 percent in 1993 to 23 percent in 1999 (114). Some of the key informants expressed their opinion that more directions in micronutrients are necessary in the policy, because it is rampant in the country. Few of them said those four strategies for controlling micronutrient malnutrition such as, (i) supplementation, (ii) fortification (intermediary intervention), (ii) dietary intervention, and (iv) public health measures needs to be mentioned. The country should move from supplementation mood to fortification mood like salt iodization. Very few of the Key Informants opined that fortification of vitamin A and Iron with appropriate food is necessary.

Unfortunately the following policy guidelines of the health, family welfare and environment sector have not yet been properly implemented, but some actions for their implementation have been taken:

- Child Nutrition Unit (CNU) with a qualified nutritionist in every Upazilla Health Complex could not be established except only 20 CNUs, which was established

several years back on experimental basis. The policy guidelines suggested to establish CNUs in all Upazilla Health Complexes to give advice and training to women about diet during pregnancy and lactation, about feeding infants and young children and about appropriate diet for sick people, as well as to treat children who have 3rd degree malnutrition.

- Food laws to prevent adulteration and to ensure safe nutritious foods to the consumers have not been updated. Even efficient mechanisms for enforcement of the existing food laws have not been developed. The importance and necessity of the food laws have been reinforced in the approved NPAN for implementation.

C. Implementation status of the important policy guidelines for ***nutrition education and communication sector*** was assessed. Among the policy guidelines the following have been implemented successfully through the existing plans and ongoing programs:

- Nutrition education and awareness creation through different mass communication media has been done. Curriculum for primary level education on nutrition have been introduced, secondary level education being reviewed, tertiary level curriculum being examined and for medical education already suggested by BNNC. Besides, all field level workers training curriculum have been reviewed and incorporation of nutrition syllabus and topics has been suggested. The Informants said that nutrition education for primary level is all right, but some wrong nutrition information are written in the books for secondary education, which needs to be corrected.
- Bangladesh Television and Bangladesh Betar (radio) has been disseminating nutrition information regularly. The focus group participants have agreed that the success of dissemination of nutrition messages from Bangladesh Television and Bangladesh Betar (radio), particularly on nutrient value of different food items have encouraged the consumer to buy those foods even at higher costs. Food habits have also been changed. Carrots, cucumber, and vitamin C- rich Amlaki,

Guava, etc. are now sold at the streets. They also cited the example of preparation technique of oral rehydration saline (ORS) for the treatment of diarrhea, which is one of the killer diseases of infants, children and adults during malnutrition. This technique is practically known to almost everyone in Bangladesh, which was disseminated by television and radio.

- The annual National Nutrition Week (23 April to 29 April) has been observed throughout the country up to the grass root level to create awareness among the people about good nutrition as well as existing problems of malnutrition and their potential remedial measures. Most of the Key Informants and focus group participants stated that three national nutrition weeks have already been observed from the date of the approval of the policy guidelines. Besides, Vitamin A Week, World Breastfeeding Week, World Food Day, World Health Day, Safe Motherhood Day, etc. have been observed with befitting manner aiming at achieving their success of creating awareness on specific themes of the year. Nutrition received prime focus of dissemination during these weeks and days. Most of the Government and Non-Government organizations participate and organize seminars, workshops, symposiums, etc., they added.

The following policy guidelines of the nutrition education and communication sector have not yet been properly implemented:

- Training on family nutrition to women participating in mothers club, non-monitised food distribution programs and other women's development activities have not been provided adequately. A few group discussants opined that some sporadic training activities are done. A training manual for the VGD women beneficiaries has been prepared, but proper training is absent.
- Emphasis on preventive and therapeutic nutrition in medical, nursing and paramedical curricula and syllabi has not been increased and not even adequate at all. It was told by one Informant that similar is the case with the training curriculum of agricultural extension workers. However, steps are taken by the appropriate authority to modify the curricula.

D. The implementation status of the 9 important policy guidelines for ***community development and social welfare sector*** are reviewed. The policy guidelines that have been implemented successfully through the existing plans and ongoing programs are:

- Women group activities to promote overall upliftment of women and for rehabilitation of landless and distressed women and their children have been increased. Free education for girls, food-for-education for the children of highly families, food-for-work for the disadvantaged and distressed women are being implemented as the Government programs. The NGOs are also implementing so many programs for the upliftment of women through formation of women groups or associations. The Key Informants and focus group discussants cited a number of examples for women development activities. They stated that almost every NGO working in the rural areas provides women with micro-credit for income generation activities. This is targeted to the women group because they repay loan regularly.
- The non-monitised public food distribution programs are being continued and expanded to provide employment to economically depressed and ill-fed people. The distribution of this food has been is questioned. Some of the Key Informants stated that "specifically the so many foods are coming to this country, through Food for Work and VGD program, which are targeted programs to the poorest of the poor. Whether these foods are reaching to the right persons, means to the nutritionally vulnerable people are targeted more. The Government is spending lot of money through different donors' channel for food. These should be reallocated and re-targeted.
- Duck and poultry farming and backyard poultry raising for production of meat, eggs, fish feed and fertilizer for income generation have been increased through different programs of the Ministries of Fisheries and Livestock, Social Welfare, Women and Children Affairs, and Local Government and Cooperatives and Bangladesh Rural Development Board. It was discussed in the focus group that

training of the youths and women on the poultry rearing are provided for rural employment, income generation and poverty alleviation.

The following policy guidelines of the community development and social welfare sector have not yet been properly implemented:

- Appropriate economic incentives are not yet provided to the farmers to increase agricultural production of non-staple food products at a profitable level. Only some incentives of buying at fixed cost of soybean, a highly nutritious non-staple food crops, has been ensured to the soybean producers in a rural area of Tangail district on experimental basis.
- Development of appropriate technologies are not yet encouraged for agricultural production to increase output and to open new employment opportunities for casual and landless laborers.

The policy guidelines that have been started implementation are good sign of the sectoral commitments and ownership. The guidelines that are yet to be implemented are being followed by the BNNC, with the hope and aspirations that implementation would be started soon.

The Key Informants mentioned that the success of the policy depends on the reflection of it in the national development plan, preparation and implementation of feasible projects/programs, and timely availability of resources. They considered resources as commitment of the Government, policy makers, bureaucrats, professionals and donors; adequate fund from Government and donors; trained manpower on nutrition; and availability of equipment. While the focus group participants stated that the success depends on the integration of the policy into the sectoral development plans and programs. Commitment of the Government, policy makers, bureaucrats, professionals and donors to implement the national food and nutrition policy with adequate fund support, skilled manpower on nutrition and community involvement in every process are important factors, they added. It was informed in the focus group that the involvement of concerned people on quick decision-making on nutrition issues is necessary. Besides, the members of the

group informed that translation of the commitments into actions, like allocation of resources both technical and financial and regular monitoring of the policy activities is necessary for the successful implementation of the policy.

4.3.2 Reflection of the Policy into NPAN and National Plan

The national food and nutrition policy of Bangladesh has been implemented by incorporating the guidelines in the development plans and programs in the country. Initially the policy has been appropriately reflected in the National Plan of Action for Nutrition (NPAN), which received concurrence and commitment of the government to implement by the year 2010. The NPAN was prepared according to the directives of International Conference on Nutrition (ICN) held in Rome in December 1992 and reflecting the policy guidelines. It was also prepared by multisectoral participation.

The implementation of NPAN would be required at least two full National Development Plan periods of 1997-2002 and 2002-2007 and a partial National Development Plan period of 2007-2012. The objectives and strategies of the policy have been considered at different levels of sectoral planning. In the meantime, it has been reflected in different sectoral plans under the Fifth Five Year Plan 1997-2002 (74).

The Planning Commission invited different nutrition relevant sectors of the government to submit their sectoral plans including the priority nutrition plans for inclusion the Fifth Five Year Plan document. The Planning Cells of the individual Ministries prepared the nutrition priority plans in consultation with the implementing organizations and Focal Point for Nutrition of the sector. They also followed the national food and nutrition policy guidelines and NPAN provisions while preparing the lists of plans. Different concerned Ministries then submitted their nutrition related priority plans for the period of 1997-2002 for inclusion in the National Development Plan after the approval of the competent authority of the Ministry. Submissions of plans are also restricted with the size of the sectoral financial

allocation for the entire plan period. Again during preparation and finalization of the National Development Plan the Planning Commission ensured multisectoral participation. Representatives from the BNNC attended in the process. The non-prioritized plans for this period are kept for inclusion in the next plan periods. The sectoral programs for nutrition was prepared by individual sectors or jointly prepared by collaborating sectors, if necessary, according to the plans. While reviewed the Fifth Five Year Plan document (74), it was observed that the nutritional objectives and plans have been included under agriculture, health, food, fisheries and livestock, women and children affairs, social welfare, and education sector. However, important nutrition projects could be undertaken by the concerned sectors if it is within the purview of the NPAN and financial support is available either from the Government or from the donors.

Fifteen different ministries, (such as, Ministries of Health and Family Welfare, Agriculture, Food, Fisheries and Livestock, Environment and Forest, Women and Children Affairs, Social Welfare, Disaster Management and Relief, Local Government, Rural Development and Cooperatives, Education, Information, Industries, Planning, Finance and Sports and Culture), Primary and Mass Education Department and NGO Affairs Bureau already nominated Focal Points (not below the rank of Joint Secretary or Joint Chief) for nutrition. Earlier there were no focal points for nutrition in any of the Ministries or sectors. Working Groups for Nutrition have also been constituted in respective ministries and offices with the Head of the offices (Secretary of the respective ministries or departments and Director General of NGO Affairs Bureau) as Chairman. These groups are responsible for implementation of programs or projects relevant to nutrition and NFNP and NPAN. These Working Groups generally meet once a month to review the individual sectoral nutrition progresses. There is a National Steering for implementation of NPAN headed by the Minister for Health and Family Welfare and represented by the Focal Points of different concerned ministries, department, bureau and development partners (129). The National Steering Committee meets quarterly. The Secretary, BNNC is the

Executive Secretary of this Committee, who is responsible for coordination of nutrition activities of the country.

4.3.3 Multisectoral Approach for Implementation of the Policy

While discussed about the strengths of the policy, most of the focus group members had the consensus that the policy has lot of strengths, as it was formulated by multisectoral approach, all sectors involved and covered almost every sector having clear directives. But implementation of a national food and nutrition policy of multisectoral nature is not so easy. The Governments' commitment and active participation of stakeholders from different sectors at all time for successful implementation of the policy is very important. The multisectoral responsibilities of implementation of the policy has been shown earlier in Figure - 4. The policy implementation strategies are directed to the policy makers, agriculturists, food industries, health professional, researchers and individuals. Policies have proven to be more effective when they originate with a broad based contingent of powerful officials within the country who can influence both the shape and the implementation of the public agenda. The policy in Bangladesh has received perhaps the most attention of the powerful officials of the time. Educational, economic, technological and legislative measures are necessary for implementation of food and nutrition policy.

The implementation of the policy sometimes requires legislative actions on certain issues. Bangladesh is fortunate that the legislative actions already existing in the country for BMS code of marketing powdered milk, Edible Salt Iodization Act, Food Safety Laws, etc. have been further strengthened for enforcement. Still more awareness on these laws or legislative actions needs to be created among the community and the people. The action plans for the development of children and women have been prepared highlighting the importance of their nutritional requirements and goals. A coordinated effort only could be useful to achieve the policy goals and targets.

The Bangladesh National Nutrition Council did the formulation of the national food and nutrition policy very confidently, although it faced problems during the process of its approval and adoption. While BNNC could not be successful initially to adopt the policy through Council meetings and advocacy, it started implementation of a development project namely "Coordinated Nutrition Program of BNNC" (130) and formulation of another development project namely "Bangladesh Integrated Nutrition Project" (131), the largest project of nutrition in the country. The researcher of the present study himself was the Project Director of the former project and the formulator of the later project based on his experience in the field of food technology, nutrition and rural development for more than two decades. Implementation of these two projects served the purpose of implementation of few important components of the policy, based on the success of which the government is planning to implement a national nutrition program (NNP) through out the country. The NNP will be consisting of most of the successful components of BINP and with some additional components like addressing food security, urban nutrition and adolescent nutrition issues in Bangladesh. The project concept paper of NNP as endorsed by the government has clearly included that the national food and nutrition policy and national plan of action on nutrition will be implemented through the project. NNP will be implemented initially for four years and then extended for three years and finally for another three years in the country.

The responsible nutrition related sectors either had modified their existing development projects on nutrition incorporating the remaining tasks in the policy and NPAN or formulated new development projects on nutrition in the light of the policy and the plan. Still some more development projects in different concerned sectors need to be undertaken, but due to non-availability of financial and technical support these could not be developed.

4.4 POLICY PROGRESS

There are some impressive progresses in the field of nutrition in Bangladesh. Establishment of the National Food and Nutrition Policy (NFNP) and a Plan of Action for Nutrition (NPAN) in 1997 with the identified responsibilities for particular ministries and agencies, and an activated Bangladesh National Nutrition Council with coordinating responsibilities are important (132).

An environment has been created in the country among the stakeholders to become aware of the food and nutrition policy and responsibilities of its implementation through the government approved national plan of action for nutrition and subsequent programs and projects. Individual sectors and agencies have already started activities for implementation of policy and plans. The sectoral Focal Points and Working Groups have started review of their sector's responsibilities for implementation of NPAN and program or project development.

Food production has been significantly increased to meet the requirement of the growing population. The agricultural policy for crop diversification as well as increased production of nutritionally rich foods, vegetables and fruits has substantially met the requirement of the people. Food policy of the government has also been turned into food security policy of the government and a committee has already been constituted to formulate it (133). Bangladesh is considering the food based approach as the best approach to challenge the nutritional problems currently prevails in the country.

Dietary guidelines for Bangladeshi population have already been formulated and its dissemination throughout the country has been started (96). The Bangladesh National Nutrition Council has approved the dietary guidelines for implementation. The messages of the dietary guidelines of Bangladesh have received great appreciation, while compared them with other countries' dietary guidelines and reported in the Dietary Guidelines in Asia-Pacific (134). According to the food and nutrition policy, the successful implementation of the dietary guidelines in

Bangladesh will definitely make a positive change in nutritional improvement of the people.

The budgetary allocation was not at all satisfactory in the field of nutrition, which has been significantly increased for health, nutrition and population sector as a whole. At present these expenditures total roughly US$ 400 million per year, nearly 7 percent of the total annual budget, with increased government contributions which now total 67 percent (132).

A 20 percent reduction in the proportion of underweight children and a 25 percent reduction in stunting among 0-5 year old children since 1985-86 and relatively a dramatic decrease in infant mortality from 94 to an estimated 77 deaths per 1000 live births (the rate in 1974 was 140).

The impressive results produced from two and a half years of field operation of the Bangladesh Integrated Nutrition Project, particularly in the reduction of severe malnutrition among young children. This project will cover 12 percent of Thanas in the country soon.

Micronutrient delivery system in Bangladesh has been at present effectively organized, particularly (i) vitamin A capsule distribution for children, along with homestead garden expansion, has reduced vitamin A deficiency among pre-school age children to one sixth of earlier levels of 1985-86 and (ii) salt iodization is universal to cover the whole country for the control of iodine deficiency disorders (132). The vitamin A deficiency among children is not a public health problem at present as it reduced to a certain level, but its prevalence among women is quite unsatisfactory.

The interest of donors and development partners have also been increased in nutrition considerably reflected by higher investment levels, more serious analytic works (UNICEF-ADB financed "RETA" study in Bangladesh ended in February 1998) and the presence of an on-going donor-based Consultative Sub-Group on Nutrition and Food Security. The World Bank, UNICEF, FAO, ADB, WFP, WHO

and other development partners are coming forward with joining hands together to eradicate malnutrition from the country.

Another success of the Bangladesh government is the termination of the expensive and poorly targeted rural rationing system while maintaining and improving targeted food transfers in the context of a rational food policy. The termination of such an incentive to the poor might cause conflicts and agitations, but it was not so happened.

Bangladesh experienced a number of disasters, cyclones, and floods almost every year and famines in 1974, even after its independence. These disasters made tremendous problems in nutritional improvements. But the successful policy decisions of the government and prompt and effective responses to natural disasters have avoided the outbreak of many nutritional disorders and famine in the country (135). The 1998 flood began in early July in the Southern Part of Bangladesh and continued over the next three months in various parts of the country, inundating 68% of the total area at various times. A total of 30.92 million people in 53 districts were affected, with a total damage of Taka 102.28 billion (Dollars 2 billion). It reaches to the peak above the danger levels on 7 September 1998. Water levels fell rapidly thereafter and by 25 September 1998, no monitoring stations reported flows above the danger levels (135). Even the untoward situation of the 1998 flood in Bangladesh, which was thought to unmanageable, was successfully handled by taking prompt policy decisions. The food security issues were seriously taken into consideration by the government to avert the crisis during 1998 flood. Recognizing the urgent need for more relief to poor, flood-affected households, the Government of Bangladesh agreed to the expansion in the number of VGF cards to 4 million cards. Even ignoring the pressure of donors the policy decision was taken to reduce the allotment to 16 kg of food grain (8 kg of rice and 8 kg of wheat) per card for October only, postponing a decision on November distribution until more definite information on food aid arrivals was available

(136). This cautious policy decision of the Government saved a lot of life, which was earlier warned by the main opposition party (137) in the country.

Since 1970s Bangladesh has contributed to a reduction in the total fertility rate by half and it is the only country among the poorest 20 where sustained fertility reduction has taken place over the last 15 years (132). It has increased coverage of child immunization from 10 percent to 70 percent over the past 25 years' (132).

The government has been persistent in the drive to achieve food grain sufficiency. This policy has been successful and food grain production has increased substantially. The strong productivity growth in Aman in the 1980s and the recent increase in the acreage of irrigated Boro have been the major contributing factors. Now it is possible to increase food grain production to 32 million metric tons through minor irrigation alone (138). The future crop production plan for Bangladesh (139) has been shown in Table- 4.2.

Table-4.2: Projected annual food requirement (in million tons) in Bangladesh

Food Category	2000	2010	2020
Rice and wheat	23.78	27.21	31.33
Pulses	2.27	2.65	2.99
Sugar/Gur	0.59	0.91	1.40
Tuber	2.35	3.33	4.52
Vegetables	8.01	9.33	10.55
Fruits	4.05	4.72	5.35
Edible oil	1.11	1.29	1.46
Milk	2.00	3.50	5.60
Meat	0.70	1.30	2.10
Fish	2.73	3.18	3.59
Eggs	0.16	0.27	0.45

Population and income growth estimates were used to project national requirements of food in major categories. Population will surge by 31 percent between 2000 and 2010 and incomes are expected to grow between 5 and 7

percent. It seems that consumers will increase market pressure to expand production of meat and other esteemed products (139).

The UN data on Bangladesh stated that the under 5 mortality, infant mortality and total fertility rates in Bangladesh has shown the trend of reduction. The rates of under-5 mortality (per 1000), infant mortality (per 1000) and total fertility (births per woman) were reduced from 211, 132 and 6.1 in 1980 to 104, 75 and 3.2 in 1997 respectively (117). The maternal mortality rate in the country is 440 per 100,000 live births in 1980-97 (140).

The nutritional status of the people in the country is improving as the government has taken certain measures and made commitment to improve the situation through an integrated approach and appropriate planning. But still it is not so satisfactory. Half of the infants were born with low birth weight during 1990-97 in Bangladesh. The percentage of exclusive breastfeeding of infants of 0-3 months age were 52, breastfed with complementary food for 6-9 months were 69 and continues breastfeeding up to 20-23 months were 90 percent during 1990s. The breastfeeding culture in Bangladesh is better than in many other countries. The percentage of moderately plus severely underweight, wasting and stunting children of under 5 years of age are quite high and thus it is not at all accepted. The estimated percentage of moderate and severe underweight children was 56, while moderate and severe wasting was 18 and stunting was 55 percent in 1990s. The vitamin A supplement coverage rate (6 - 59 months) was 95 percent in 1998 and the iodized salt consuming households were 78 percent during 1992-98 (141).

The access to safe water and sanitation of the Bangladeshi population was 95 and 43 percent respectively during 1990-97 (140); while to the communication media, like news paper and radio were 2.8 percent and 5.0 percent respectively in 1996 and television were 0.7 percent in 1997 (117). The adult literacy rate in Bangladesh is quite low compared to many developing countries. The rate has been increased in male from 41 percent in 1980 to 49 percent in 1995 and in female from 17 in 1980 to 26 percent in 1995 (140).

Bangladesh is the only country in the subcontinent who is observing 3 weeks for the creation of awareness on nutrition throughout the country: one week to observe the 'National Nutrition Week", one week for 'Awareness of Vitamin A' and another week for the observance of 'World Breastfeeding Week". Besides, World Health Day, Safe Motherhood Day and World Food Day and other nutrition related days are also observed. Not only that national fisheries fortnight is observed each year in the country. All these weeks, days and fortnights are observed in a belitting manner involving the national, district, Upazilla and community level leaders and the beneficiaries. This has a good impact on changing behavior particularly in nutrition.

The complementarity between government and non-government organizations greatly helped in implementation of successful programs (e.g. Expanded Program on Immunization) in Bangladesh. Both these two types of organizations are the key players in developmental activities in this country. The collaboration between the government sectors as well as non-government sectors are important in implementation of the food and nutrition policy. Since NGOs were involved in policy formulation process in Bangladesh they would also have to share the responsibility of its implementation.

The policy implementation is not always an easy task; the role of many players (Stakeholders) particularly for nutritional improvement in an integrated way, sharing of the success and failures of policy implementers, bears the future strength of the fruitful policy. Bangladesh may be a good example of fruitful policy maker on food and nutrition policy through experiences gathered in the field.

However, the effectiveness and suitability of implementation of the national food and nutrition policy and its development as derived from in-depth interview and focus group discussions have been described and analyzed in the following chapter 5 using SWOT model. The effectiveness and suitability of policy process was also evaluated by the criteria described by Halcrow (22) and Helsing (51)

Chapter 5

EFFECTIVENESS AND SUITABILITY OF IMPLEMENTATION OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH

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5.0 EFFECTIVENESS AND SUITABILITY OF THE POLICY

The effectiveness and suitability of implementation of the national food and nutrition policy of Bangladesh were assessed by qualitative research. Rapid appraisal technique was used to collect key information on the effectiveness and suitability of implementation of the policy. Observations, in-depth interviews of the key informants and focus group discussions were conducted to collect the information.

The policy-keepers office i.e. the Bangladesh National Nutrition Council and different concerned Ministries of the Government, who are involved in implementation of the national food and nutrition policy and national plan of action for nutrition, were visited and observed through a check-list technique. The in-depth interview was organized with the selected 40 Key Informants making pre-appointments. Six focus groups sessions were organized separately. A total of 44 participants, four groups consisting of 7 participants in each group and two groups consisting of 8 participants in each group, attended the group discussion sessions. The participants were from senior administrators, academia, professionals and conscious and interested policy beneficiaries selected from the Government, Autonomous and Non-Government Organizations and who agreed to attend and contribute to group discussions. The information on the strengths, weaknesses, opportunities and threats to the implementation of the national food and nutrition policy were collected by in-depth interview of Key Informants and focus group discussions using the semi-structured interview guides and micro-cassette recorder. The information obtained from in-depth interview and focus group discussions has been transcribed, analyzed using SWOT model (118) and discussed in this chapter.

The Key Informants and focus group participants described the importance of the national food and nutrition policy of Bangladesh. They stated that the policy guidelines are country's vision to improve the nutritional status of the population. It recognizes the necessity of nutritional development. Almost all of them further said that the policy is instrumental to guide the nation and to give future directions. Again most of them consider the policy as an important and useful comprehensive document approved by the Cabinet (Council of Ministers).

5.1 STRENGTHS TO IMPLEMENT THE POLICY

The strengths of the National Food and Nutrition Policy are important indicators for its successful implementation. It indicates the internal environment of the policy. There are ***five major strengths*** to implement the National Food and Nutrition Policy of Bangladesh as identified by the Key Informants during in-depth interview and by the participants of the focus group discussions.

- **A Consensus Document with Human Right**

  The best strength of the national food and nutrition policy is that the Government has considered and recognized nutrition as a human right and the Cabinet has approved it (In-depth interview). Majority of the Key Informants said that the stakeholders from both public and private provided whole-hearted support during policy formulation process, which might be the strength of the policy. They also stated that policy strengths depend on integration of all efforts and particularly inclusion of public and private sectors' efforts; the national food and nutrition policy of Bangladesh has owned it. The focus group participants stated that it is the good intention of the Government to consider nutritional improvement not only as a developmental issue but also as human right. They also said that nutrition is the constitutional right of the people and the Cabinet members are mentioning it in different forums.

Many Key Informants (especially the policy makers and policy implementers) said that continuity of commitment and support of the Government and political leaders are necessary for keeping its strengths. As a policy document it has all of these strengths at present. The strengths of the policy need to be used during appropriate implementation of it, they added. However, the policy is a consensus document, prepared by different sectors, public and private, considering nutrition as a human right, which shows policy's internal strengths.

- **Formulated by Multisectoral Approach**

Majority of the Key Informants informed that the policy is a short but comprehensive and well thought document, formulated by a good process, involving the experts of the country. All sectors (Agriculture, Fisheries and Livestock, Food, Health and Family Welfare, Women and Children's Affairs, Rural Development and Cooperatives, Social Welfare, Education, Information, etc.) cooperated in its formulation and their concurrence was obtained through confidence and sharing of commitments. It is a multisectoral document with the approval of the Government (In-depth Interview). A good number of focus group participants opined the same by stating that the policy formulation process involved almost all concerned sectors, Ministries, organizations and agencies, through consensus building mechanism. This would certainly make responsible of all participated organizations or at least the persons who were involved in the process. Most of the focus group members had the consensus that the policy has strengths as it was formulated by multisectoral approach, all sectors involved in the process and covered almost every sector having clear directives. They also clarified that the policy document has good strength as all the concerned nutrition sector's guidelines are brought under four major sectors. The broad sectors like, (i) Food, Agriculture, Fisheries, Livestock and Forestry; (ii) Health, Family Welfare and Environment; (iii) Nutrition

Education and Communication and (iv) Community Development and Social Welfare were endorsed and the broad policy guidelines have been stated. The strength of the policy is that the whole gamut has been considered within four major sectors, and the scope of coordination already started within each major sector, the group members opined. The majority of the group participants said that each major sectoral guideline have been further elaborated in to number of guidelines to be implemented with the help of different sub-sectors. Food, agriculture, fisheries and livestock sector has 16 guidelines, health and family welfare has 15 guidelines, nutrition education and communication has 12 guidelines, and community development and social welfare sector has 9 guidelines, they described. They added that the guidelines of these four major sectors have been elaborated in ten themes of the NPAN and if these themes are implemented successfully the objectives of the policy will be achieved. Some of the focus group participants also described that the role of BNNC has been included in 11 items in connection with the implementation of the policy, so that the progress of policy activities is not hampered.

The Key Informants enthusiastically stated that the strengths of the policy have been proved through preparation and approval of multisectoral national plan of action for nutrition, implementation of Bangladesh Integrated Nutrition Project and subsequent preparation of the National Nutrition Program (with multisectoral participation) in the country. A few policy makers as Key Informants informed that some points were raised against the nutrition policy by few technical people although they were involved from the very beginning of policy formulation, as those were conflicting with other policies, were compromised through discussions and negotiations. Some of the Key Informants stated that once upon a time some people cannot even pronounce 'nutrition' clearly; the bureaucrats said, "The country where people cannot eat, what is the necessity of nutrition program?" and sectoral conflicts of leadership

without performing the responsibility prevails in a country. In that country, where the national food and nutrition policy is approved in the Cabinet with multisectoral concurrence and regular pushing of the BNNC is certainly the strength of the policy. Some of the academicians said the policy would certainly bring a positive change towards improvement of nutritional status of the population.

- **Complement to Other Policies with Ownership**

The Key Informants stated that these policy guidelines would be complementary to other policies of the Government. Some of them said, for example, that this policy envisaged the need to intensify the process of crop diversification, which is also the important component of the agricultural policy. Similarly, this policy guidelines under health sector considered the prevention and treatment of nutrition related non-communicable diseases, such as, cardiovascular diseases, diabetes, cirrhosis, gastric and duodenal ulcers, deworming of children, etc. which are complementary to the health policy (as included in health policy of the Government). They also added "this policy is fortunate that the individual sectoral policy makers were involved in its formulation process and so they have the ownership and responsibility to implement it through their sectoral policies, plans and programs." The focus group discussants stated that "it is an unique policy document and is complementary to the existing Government policies in Food, Agriculture, Fisheries, Livestock, Forestry, Primary Health Care, Environment, Education, Information, Industries, Commerce and other development areas." It will not create any conflict with other existing policies rather assist and that is the strength, they added. Many of the guidelines have been implemented, such as, food production, particularly rice has been increased; vegetables and fruits production are also increased; national nutrition week has been observed to create awareness of the population on nutrition; etc. The discussants also stated

that the policy has been reflected in NPAN, 5th Five Year Plan and different sectoral programs and projects. They also stated in the same tune that the concurrence of the stakeholders during its formulation and approval gave them ownership as well as make them responsible of the policy, which is also a major strength of it.

- **Broad Goals and Objectives with Wider Coverage**

The Key Informants during in-depth interview stated that the goals and objectives of the policy are stated broadly. Its four major strategies are also broad and further elaborated on how it would be implemented. This policy is not limiting the formulation of any specific plans and programs for nutritional development activities, they added. Most of them informed that the policy has covered the sectoral aspects adequately. The document is though a small one, but it has enough strength, because of its wider coverage of all sectoral guidelines. Food security, health and caring practices have been taken well care of in the policy. Education is also considered as a behavioral issue and family members may be educated through communication media. All the sectoral issues concerned with nutrition with the concurrence of the stakeholders have been included in the policy is the major strength of it. Homestead gardening is a social movement and ministry of agriculture is promoting home gardening seriously, many of them said. The rural poor approach by home gardening would be excellent for food security. Traditional knowledge on nutritionally healthy diet, environmental issue, credits for employment generation have also been considered. The consideration of the elderly age group as nutritionally vulnerable, development of food preservation and distribution technologies as a policy objective, giving importance to family unit, advocating inter-cropping and use of newspapers columns etc. are certainly the strengths of the policy. Many Key Informants expressed that the policy document should not be very specific, it should be broaden guiding framework, so that detail specific

activities should be developed by each sector within the framework and the Bangladesh national food and nutrition policy is excellent in this regard.

More than half of the focus group participants informed that the policy has wider coverage with crystal clear directives and broader guiding framework of all sectoral guidelines. The policy goals and objectives are broad and achievable. The major strategies are elaborated. Besides, they stated that this policy is not making any obstacle to the preparation of any nutrition plans and programs for national development. Most of them informed that the policy has covered sufficiently all-sectoral aspects. Food security, health and caring practice; the three main issues for nutritional achievements have been focused in the policy, which is a good sign, they added. Income generation and community participation has been covered in the policy, which are now very essentially considered in every policy of the Government.

It is important that some people as strengths may consider some statements while others may consider those as weakness. Broadness of policy that in general terms allows flexibility but does not specify what needs to be done. The flexibility of doing things may not be always in right direction. Besides, what to do and how to do is important. Therefore, the broadness of the policy is considered as the strength by them who have the knowledge to use it appropriately and as weakness to those who cannot use it without specification. Therefore, for easy implementation of the policy, it requires a guiding manual.

- **An Enabling Document**

Few Informants recognized the national food and nutrition policy as an enabling document, which means it will help us to guide and will give us the future directions rather than give us future solutions. Solutions will come up from specific sectors and specific programs. It is a way out and direction-oriented document. This is a live document, everybody will use it and

according to necessity it would be modified. Some focus group participants also stated the same.

Many of the points identified as strengths of implementation of the policy by the participants of the focus group discussions have the conformity with the points identified during in-depth interview. It showed that the policy guidelines have very good strengths of implementation.

5.2 WEAKNESSES TO IMPLEMENT THE POLICY

Assessment of the weaknesses of the National Food and Nutrition Policy are also important to analyze for recommending their removal. Weakness also indicates the internal environment of the policy.

The Key Informants and the group participants opined that there is no major weakness of the policy, because it has been formulated through a long continuous process having participation of policy makers, professionals, government and non-government officials and beneficiaries. But during in-depth interview and focus group discussions they identified ***five weaknesses***, which needs to be minimized for effective implementation of the National Food and Nutrition Policy.

- **Lack of Implementation, Monitoring and Evaluation Guidelines**

  A few Key Informants stated that there is no mention of effective and specific policy implementation, monitoring and evaluation strategy in the document, which might be a weakness. The policy should be more multidisciplinary but integrated. More production of rice and wheat gradually reduces the fish production; strategy for nutrient balance would be necessary. The Informants also stated that the policy should be a live document, it might be updated according to the current situation based on achievements or failures. But the modification should be at regular interval through evaluation of the policy. The Informants stated that the implementation strategies or follow-up of the policy by different sectors, agencies and organizations are not taken up, except the

Ministry of Health and Family Welfare and the Ministry of Agriculture. The Health Ministry has developed a long-term vision for 20 years substantially and sustainably, and trying to undertake food security measures while other Ministries are not taking steps. A few participants informed that the Ministry of Agriculture has the major target of production, but they have no vision to convert production into consumption and finally, transformed consumption into nutrition. Similar is the case with the Ministries of Fisheries and Livestock. Some of them suggested that a comprehensive dialogue is needed to come up with a comprehensive nutrition program. It was mentioned that food production, distribution, and marketing system has not been elaborated in the policy. Food policy, agriculture policy and other government policies are there. It was also mentioned in the focus group discussions that the implementing guidelines of the policy are important. Because, implementing guidelines help more actively and more objectively implementation of the policy. But the present food and nutrition policy might have less concrete implementation guidelines. One of the group members stated that since nutrition policy guidelines are multisectoral, so there would not be one implementing guideline, each and every sector should have their own implementing guidelines. Some examples were cited in the discussion that the guidelines for health and nutrition would be one type, the education guidelines should be another types and agricultural food production guidelines would be separate, while income generation guidelines would be different. The members opined that every sector should prepare their own implementing strategies according to the policy guidelines and then there would be coordination of the implementing guidelines or strategies at some level, may be at BNNC as it is the apex body headed by the Prime Minister. The role of BNNC as mandated in the policy has included coordination of all nutrition activities during implementation, monitoring and evaluation and also overview the nutrition situation of the country from time to time. However, most of the members of the groups stated that the policy

guidelines have no lacking, but its implementation guidelines are not clearly mentioned and followed. The implementation of the policy is, therefore, lagging behind. Translation of the commitments into action (NFNP to NPAN to program and activities) and regular monitoring of the policy activities are not there in the document although these are essential factors to the successful implementation of the policy.

- **Lack of Strong Commitment and Earmarking of Fund**

  Strong commitment of the government and political leaders as well as donors, professional and even beneficiaries is very important for implementation of any policy. One Key Informants said that food and nutrition policy is not mandatory to the Government, as observed lack of commitment during policy formulation, due to which financial aspects, like allocation of fund for socialization of the policy; implementation, coordination and monitoring of the policy are still lacking. However, the commitment of the Government was obtained later on. The Informants added that allocation of fund from different sources (Government and Donors; Central and Local) could be mentioned in the policy, although it is written in the policy that different concerned sectors will allocate fund for implementation of the nutrition activities as guided by the policy. Some of them pointed out that, even there is provision of fund support in the policy for social mobilization and monitoring of the policy, BNNC could independently acts on it. A few Key Informants said that the policy did not earmark allocation of fund even for central activities, which would be better, if included. Many other food and nutrition policies have mentioned about allocation of fund for implementation of the policy, but it was not possible to do so during formulation of it, some of them said. One of the participants stated that if the existing health centers at rural areas conduct regular survey (yearly or bi-yearly) on nutritional status of the population, then fund allocation for it

would not be a major problem. The nutrition program can be prioritized depending on situation at the locality.

One Key Informant from the donor community asked, "We are saying that we are committed, is it true?" He informed that at present only 0.03 percent of the GNP is spending for nutrition in Bangladesh, which is far below than the global target of at least 0.5 percent for the developing countries. India is spending 0.3 percent of GNP for nutrition, even Sri Lanka is spending 1.0 percent of GNP for nutrition. The commitment of the government should be reflected into activities, at least in allocation of budget for nutrition, sincerity in implementation of the policy and designating the policy keeper with full authority to implement, monitor and evaluate the policy. Lack of strong commitment and allocation of resources (financial and trained manpower) for implementing the policy was identified as weakness of the document by majority of the Informants. The focus group participants gave the similar opinion. Possibly these weaknesses could be overcome if opportunities of the policy is utilized successfully.

- **Policy-keeper's Inadequate Leadership, Authority and Support**

During in-depth interview, some Key Informants stated that the role of BNNC is not appropriately mentioned in the policy. The Council's role should be more specific, it should have adequate leadership with more authority to exert power to implement the policy through NPAN and nutrition programs by different sectors. The implementation of the policy depends on the strong performance of the policy implementing body, they added. They opined that in this case, BNNC is the body and thus status of the BNNC should be strengthened and clearly ascertain responsibility of smooth implementation of the policy. Some of them stated that NPAN also mentioned the same thing, but nothing has yet been materialized. The focus group participants stated that the policy do not

have any major weakness. However, the formulators do not have the authority initially to identify the implementing agency of the policy. Most of them said that the BNNC should have the monitoring authority of policy implementation like other countries. It was also came into discussion that social mobilization on the policy to create awareness among the population is lacking and has not done properly. If the policy makers, political leaders, bureaucrats, local government infrastructure at the grass root level, i.e. Union Parishad Chairman and Members are aware of the policy, the policy can easily be implemented. They again informed that there are policies, researches and many good results, but there is no extension or publicity of them. It is now necessary to establish a nutrition information and documentation center at BNNC, which can provide feedback to the different sectors and stakeholders. One of the participants said that there is a SAARC information center on agriculture in the Bangladesh Agricultural Research Council, whereas nutrition information center is not yet established at BNNC, although it is stated in the policy. They proposed that survey on nutrition situation in the country should be done at regular interval and information on the results should be disseminated to different sectors to address the problems. Both success and failures of the nutrition actions should be disseminated, depending on which future actions could be taken. The group members discussed about the status and authority of BNNC. One member cited the example of National Nutrition Council of Philippines, which has enough authority, established by Decree, has adequate financial support and even the post of the Executive Director is a constitutional position of the Government. They opined that BNNC should have appropriate status, enough authority and resources to exercise its power in implementation of the food and nutrition policy and plan through nutrition activities. Few members of the focus groups informed that "the guidelines in the policy have been vividly explained under each major sector, the role of BNNC has been clearly documented and now it is our responsibility to see how the policy is being implemented. Generally,

multisectoral policy is being formulated very nicely and appropriately as a document by some enthusiastic or interested group, but while it goes for implementation it faces lot of problems. There is none to take responsibility to resolve the problems." They said that sometimes policy becomes only a paper document and useless because of lacking in implementation and monitoring. However, the participants were of the opinion that the food and nutrition policy in Bangladesh was essential to be developed much earlier, but as it is formulated and approved by the Government, its implementation should be looked into very carefully and sincerely.

- **Ambitious Target**

It was informed by majority of the Informants that as a policy document it has no major weakness, most of the areas covered in the policy. The participants stated that the document is really a very comprehensive one, and they are complacent with it, but how to transform it into programs and activities is missing and not clearly stated and properly worked out. The vision is very high, very broad and long, they envisaged. One Key Informant said that the policy was prepared before the International Conference on Nutrition and International Children's Summit; most of the policy strategies have been included in NPAN within ten themes. The NPAN is an elaborated document with sectoral plans and activities. A few Key Informants also stated that everything couldn't be specified in such a small document. It has been developed over long period and has a historical background. The national nutrition goals for only 1990s should not be mentioned in the policy, it should not be time bound, it should have longer vision, they said. Now the targets and achievements should be reviewed and re-fix the targets with longer vision in the document. A few of them identified weakness of the policy that, firstly, a very ambitious target has been fixed which cannot be achieved. Secondly, a lot of nutrition activities are going on in the country and what are the lessons learned from Bangladesh specifically

and from this region can be included in the policy. Thirdly, the sector work done in 1985 by the World Bank, which was very thorough could be mentioned in the policy. And specifically the so many foods are coming to this country, through Food for Work and VGD program, which are targeted programs to the poorest of the poor. Whether these foods are reaching to the right persons, means to the nutritionally vulnerable people are targeted more. The Government is spending lot of money through different donors' channel for food. These should be reallocated and re-targeted. Some of the key informants expressed their opinion that more directions in micronutrients are necessary in the policy, because it is rampant in the country. Few of them said four strategies for controlling micronutrient malnutrition are (i) supplementation, (ii) fortification (intermediary intervention), (ii) dietary intervention, and (iv) public health measures needs to be mentioned. The country should move from supplementation mood to fortification mood like salt iodization. Very few of the Key Informants opined that fortification of vitamin A and Iron with appropriate food is necessary. A few of them also mentioned about target focused nutrition program. They said the pockets of malnutrition problems should be identified. The Ministry of Health can easily identify the target groups around the Health Centers and take appropriate measures through their existing infrastructure at rural level.

- **Ignored the Lessons Learned**

  One Key Informant stated that the policy needs to be considered as a developmental issue, but promotion of breastfeeding, elimination of micronutrient malnutrition, monitoring and evaluation strategy; lifestyle and food safety issues are weakly elaborated in the policy. Guidelines on food based approach and micronutrient issues are weakly expressed in the document. Another Key Informant said, "the policy did not mention the relationship between the ecological zones and nutritional availability, which is weakness.

There is no mention of necessity of nutritional mapping in the policy and specific guidelines on it. There are some soils in stress areas, which are deficient in nutrients, particularly in Zinc, Sulfur, Iodine, Manganese, Magnesium, Cobalt, etc. which has good relationship with nutrient availability in plants and ultimately to animals and human. Soil stresses are known as plant-animal-human syndrome, which is important for nutritional considerations, but these are not mentioned in the document." He added that researches on nutrition, particularly biological availability of nutrients are not encouraged and resources for it are scarce in the country. It deserves prominence in the policy, because depending on the results of researches the policy might be changed. Few Informants stated that proper monitoring of the food safety acts and drugs policy is not done and perhaps the same is happened for nutrition policy. Few key informants also informed that increasing production of food, rice in particular and irrational use of fertilizer, insecticides and pesticides for growing food crops has diminished production of fish. Besides, there is no measures against those sectors that are eroding our natural resources, e.g. river water pollution by industrial units which in turn is reducing the fish population. This is lacking in the policy. So there should be strong coordination among the sectors. Although there are guidelines for educating family, but how? Non-institutional approach is not providing the desired result. Nutrition curriculum for primary and secondary schools and appropriate training of the schoolteachers through TOT (Training of the Trainers) would be necessary.

The focus group participants also said that the policy is excellent but a bit ambitious. Resources including manpower and fund is important factor. Health, Education and Agriculture sectors have rural infrastructure with trained manpower and they are in advance but Community Development and Social Welfare sector should have to further advance for nutritional development, the discussed. Increase involvement of women in nutrition activities and

community participation in nutrition is considered as policy guidelines, but implementation is not advanced. While the less emphasis or lacking of micronutrient malnutrition in the policy was pointed out by some member of the groups, most of the members disagreed and stated that micronutrient issues have been broadly addressed in the policy. It was also told that micronutrient issues have been elaborated in the NPAN as a theme and specific projects have been suggested, so it is not less emphasized.

Many information collected through focus group discussions on the weaknesses of implementation of the policy have conformity with the information given by the Key Informants during in-depth interview.

The respondents also compared between strengths and weaknesses by saying that there are more strengths of the policy than the weakness. Therefore, the identified weaknesses of the policy could be overcome by taking appropriate measures in time. The academicians could play a big role to implement the policy in right direction and remove the weaknesses suggesting appropriate measures.

5.3 OPPORTUNITIES TO IMPLEMENT THE POLICY

Finding out the opportunities of the National Food and Nutrition Policy are also important to analyze so that it can be usefully utilized for the removal of the weaknesses and to improve upon the strengths of the policy for its effective implementation. Opportunities represent the external environment of the policy.

The Key Informants and the group participants opined confidently that the policy has wider scope and opportunity, because it has created a congenial policy environment in the country involving participation of policy makers, professionals, government and non-government officials and beneficiaries. But during in-depth interview and focus group discussions again they identified the following ***five***

opportunities, which needs to be utilized for effective implementation of the National Food and Nutrition Policy.

- **Social Mobilization of the Policy**

  Most of the Key Informants stated that an effort should be made to publicize the policy, targeting all section of people, starting from parliamentarian, political leaders, bureaucrats, and professionals to all beneficiaries. Some of them said that popularization of the policy is the first step and then if anything wrong and unnecessary found in the policy that may be discarded. All sections of people should know about the policy of the government. A few of the participants suggested that successful implementation process of the policy should be added to the document, depending on the experience. Everyone should know the contents of the food and nutrition policy and therefore, its dissemination is necessary and this will open the opportunity, many Key Informants added.

  The Informants also stated that policy should be reflected to the development plans and every development project or programs should have to look into the food and nutrition policy implications while formulated by different sectors. Some of the focus group members suggested that program approach for nutrition is needed. Adequate nutritionists, efficient management capability and strengthening the nutrition activities through institutional capacity building are important for successful implementation of the policy. Some of them opined that nothing would happen in the field of nutrition if the community participation is ignored from the policy making process to its implementation and therefore, social mobilization would be necessary. But due to lack of knowledge of relevant policy actors about the contents of the policy many guidelines have not yet been implemented, they added. The focus group participants suggested that creation of awareness among the policy makers, community leaders, GO and NGO officials and professionals on the

components of the policy will open more opportunity. Some of them also stated that there is no quick fix for nutrition that 5 or 10 years will be required to eradicate the nutritional problems. Since it is an intergenerational problem, it should be addressed intergenerationally. That means the program should address three generations: the children, the adolescent and the mothers. One of them categorically said "We have to go a long way and we are sure more needs to be done."

It was told that some of the sectors are not enthusiastic to implement the food and nutrition policy, may be due to lack of motivation and awareness. Besides, the policy document was prepared in English. Printing of sufficient number of copies of the national food and nutrition policy from the Bangladesh Government Press and distribution to the concerned Government and non-Government organizations is not enough for complacence, they added. Some of them also stated that the policy document was distributed to the Ministers, Secretaries, and Nutrition Focal Points of different Ministries, Deputy Commissioners of all Districts and Upazilla Nirbahi Officers (Sub-District Executive Officers) of all Upazillas in Bangladesh. But no policy awareness meetings were convened on its contents and for its implementation, except a national plan of action for nutrition to be implemented by 2010 has been prepared and approved, they opined. The focus group participants stated clearly that the success of the policy depends on the reflection of it in the national plan, preparation and implementation of feasible projects/programs, timely availability of resources. They considered resources as commitment of the Government, policy makers, bureaucrats, professionals and donors; adequate fund from Government and donors; trained manpower on nutrition; and availability of equipment. Many of them also given importance on involvement of everyone in regular dialogue and quick decision-making on nutrition issues.

- **Wider Scope of the policy**

The majority of the Key Informants opined that the policy is appropriate and all right for the country. It should be implemented through plans and interventions. They mentioned that there is no limitation of the policy to implement any sectoral nutrition activities towards improvement of nutritional status of the people of the country. Intervention could be undertaken very easily because of inclusion of - food, health and care in the policy. They stated clearly that the opportunity of the policy is that it has unfolded the problems in each sector and suggested remedial measures of the identified problems. Ministry of Health and Family Welfare being the lead ministry for nutrition, coordinate the activities of nutrition through BNNC. They also stated that the policy has tremendous scope and opportunities, as it is a Government approved document. The policy is designed to implement in the community through their participation and economic considerations are there. It was opined during in-depth interview that malnutrition is a social problem and therefore, it should be addressed accordingly. They stated that opportunity has been created, the NPAN has been prepared and approved by the Government reflecting the policy with a time-bound framework and subsequently national nutrition programs are coming up depending on the success of the Bangladesh Integrated Nutrition Project (BINP). The Key Informants from Ministry of Agriculture and Food stated that "if we can implement the nutrition policy of the Government through NPAN and subsequent nutrition programs, then malnutrition would no longer be a public health problem in the country." This statement is unique because she was so motivated and health conscious, being in-charge of the Ministry of Agriculture and Food. Most of the focus group participants mentioned that this policy has wider scope and opportunity as the Government has approved the document at the meeting of the Council of Ministers. The sectoral leaders represented the meeting. They also stated, "the policy has opened the scope of formulating NPAN and sectoral programs and projects on nutrition. The NPAN

has also mentioned the sectoral projects need to be implemented with time frame by the Ministries and agencies. It also included strategies of implementation." The policy has broad scope of implementation and accordingly NPAN is being implemented through different projects, they informed. Some of the focus group participants supplemented that while formulating this policy document, only the implementable guidelines were considered and non-implementable guidelines were discarded. Rationality of the policy issues has been considered initially which has increased the opportunity of implementation of the policy.

- **Problems and Measures Suggested**

The Key Informants opined that the policy has unfolded the problems of malnutrition in each sector and also suggested their remedial measures. This is the opportunity of the policy to utilize resources for taking actions against the problems since remedial measures are included. During discussions it was pointed out that the policy has no limitation to implement any sectoral nutrition activities, but it will complement other sectoral policies. It was also agreed that the policy has unfolded the problems in each sector and suggested remedial measures, which are the opportunities. Many of the Informants described the policy document as broad guidelines for nutritional improvements and if any nutrition sector wants anything to do, they have the opportunity to do under these guidelines, since there are flexibility. One of the Key Informants stated that special attention for nutritional improvements to the targeted beneficiaries, like age groups, geriatric, floating people, city life, diet related life, vulnerable population, and infectious disease control should be focused that will give more opportunity to use benefit of the policy. Nutrition monitoring system with responsibility should be specifically mentioned. They further stated that the policy should be translated into different languages, particularly in Bangla for

easy understanding of the readers of the country. Its get up should be more attractive, so that everybody likes it and always keep it with them proudly.

The opportunity of efficient and suitable implementation of the national food and nutrition policy will be utilized as an advantage to improve the strengths of the policy. The weaknesses of implementation of the policy will also be removed by taking appropriate steps as it has already been identified. The strong coordination of the stakeholders through using the strengths and opportunity of the policy implementation will immensely reduce the weaknesses and threats of it.

- **Congenial Policy Environment**

It was also mentioned by majority of the Key Informants that the opportunities of the policy are very high, if steps are taken for motivating the donors forum, Government officials (bureaucrats), political leaders and leaders of NGOs, strengthening of the nutrition coordination body (i.e. BNNC) and accumulation of resources. They also stated that there are many scopes and opportunities to make the policy more realistic for smoother implementation. It requires only the integration of the commitments of the government and nutrition professionals to improve the nutritional status of the people and recognition of successful implementers. It was opined in the focus group discussions that the national food and nutrition policy has enough opportunity for implementation, if the political commitment continues and funds allocation for nutrition increased and the existing environment among the Government, development partners and NGOs for nutritional improvement sustained. Many of them stated that continued political commitment is essential for effective implementation of the policy. They added that different political parties may come into the Government, but continuation of the policy on improvement of nutritional status of the people should be the motto of every Government. It was

mentioned that the existing congenial environment among government, donors and NGOs and increased allocation of financial support for nutritional improvement would open further scope and opportunity.

The focus group participants added that BNNC received a small amount of fund from the Government's revenue budget to meet only the recurring cost of the BNNC Secretariat. It has no legislative status, although several steps were undertaken; which is also observed as barrier to receive funds from other donors. The implementation of such a gigantic task of effectively and suitably implementation of an ambitious but necessary multisectoral food and nutrition policy with different stakeholders support and devotion is not so easy. But the BNNC Secretariat officials were very optimistic of implementation of the policy, if the political commitment continues not only in formulating the document but also providing financial and technical support to implement the plans and programs to improve nutritional status and healthy lifestyle of the population in time. Two thirds of the Key Informants stated that BNNC should have enough authority and additional fund to play policy keeping and supervisory role in the country. Many of the participants stated that continuity of political commitment, political stability, economic growth and organizational structures are important footings of the successful and effective implementation of the policy. Commitment of the Government, policy makers, bureaucrats, professionals and donors to implement the national food and nutrition policy with adequate fund support from Government and donors, skilled manpower on nutrition and community involvement in every process are important factors they added. They said involvement of concerned people on quick decision-making on nutrition issues is useful. Besides, the members of the group informed that translation of the commitments into actions, like allocation of resources both technical and financial and regular monitoring of the policy activities is necessary for the successful implementation of the policy.

- **Modification Scope**

The Key Informants suggested that since there is opportunity of modification, the policy might be updated incorporating the governments' commitments including financial allocation and considering the existing situation and changes in the field of nutrition. They also suggested that the identified gaps of the present policy should be minimized. Some of them opined that the policy guidelines should be a live document and it should not be specific or fixed, which can be modified with changed situation and need, the Bangladesh policy has that opportunity. It is also mentioned in the document too. Example was cited by few Key Informants that the Health Ministry has been implementing a project, BINP or preparing NNP, which is a part of the policy guideline. But it is one sectoral approach. The NNP will be partly implementing the policy guidelines, which is not the total answer to the guidelines of the policy. There is the need of multisectoral approach that means program approach. Informants also said that the policy might be updated synchronizing the plan periods and considering the progress and achievements in macro and micro levels. The nutrition situation analysis should be continuously done. Few of the informants stated that since the policy is approved in the Cabinet, it is not always easy to modify. Some of them said that after implementation of the first phase of NNP, the less emphasized subjects may be considered for inclusion in the policy depending on the experience of NNP. They suggested modification of the policy in the year 2004. Only a few Informants said that if the professionals agree to improve the policy, time has come to update it. Two Key Informants also advised to look into the matter that whether fund has been spent in right or wrong direction for nutritional improvements. Time and situation is changing, we have to make the document more flexible. While one of the Informants from health sector categorically mentioned that at the beginning of the millennium the policy may be reviewed and gaps may be identified and actions for filling up the gaps in the policy are needed. Some Informants pointed out that the

recent nutrition sector review of the World Bank has included economic analysis that has been made at macro level i.e. how much money comes for whole nutrition sector from government and donors level has been done. The major players for nutrition have also been identified. Some of them suggested that the successful implementation of the food and nutrition policy needs its modification by incorporating the important components, which are identified as gaps, like, strategy of implementation, financial commitment and its reflection, involve more people in dialogue, etc. of the present policy. The commitment from the highest authority to translate the policy into action (BNNC already observe the National Nutrition Weak), discarding project approach to Program approach, train adequate manpower in nutrition, ensure efficient management capability and strengthening the nutrition activities through institutional capacity building. Finally, the community participation from the process of policy making to implementation through social mobilization would be necessary.

The allocation of resources for implementation of the policy through plans and programs are not mentioned in the document. Some of them said that proper dissemination of the policy by the government is lacking. Besides, how the community will be involved in the process of implementation of the policy is missing. The participants also mentioned that monitoring of the policy from the grass root level and regular dissemination of the report to the public are necessary. They said that experiences from BINP and NNP would also help to identify the opportunities in policy implementation, but it would take time.

5.4 THREATS TO IMPLEMENT THE POLICY

Assessment of the possible threats to implement the National Food and Nutrition Policy is essential to analyze so that it can be effectively minimized. Threats represent the external environment of the policy. During in-depth interview

and focus group discussions the following ***six possible threats*** to implementing the policy were identified, which needs to be minimized for effective implementation of the National Food and Nutrition Policy. Most of the Key Informants and focus group stated that theoretically there is no threat, but practically there might be some threat in implementation of the policy.

- **Lack of Knowledge**

  The Key Informants identified number one threat is that people do not know about the contents of the food and nutrition policy. They stated that even the nutrition experts of the donors, the Senior Administrators, who are implementers of the policy, the bureaucrats and the decision-makers and policy-makers are lack of awareness of the policy. Lack of knowledge of the nutrition concerned people like the doctors and non-doctors community about the contents of the policy is a threat to implement the policy. While one of the participants informed in the focus group that the policy has been distributed to them, others asked do they have time to read it? A few of them suggested that it is better to organize dissemination seminars on the policy to make them aware of the policy. Ignorance of the development partners, policy makers, bureaucrats, Government and non-government officials, program managers, community leaders and even the farmers about the policy guidelines may create hindrance to implement it, the group participants added. The Key Informants said that understanding the contents of the policy and taking actions accordingly is the right of the people. They also foresee ignorance of many nutritionists, donor communities, managers of nutrition projects, decision-makers and policy-makers about the policy may be the important barriers. The group members identified ignorance of the policy and even the Acts or Laws some times be the threats for suitable implementation. One of them cited that once the Ministry of Commerce imported non-iodized salt in the country because of ignorance, although the existing law does not permit it.

One of the informants stated "even the ignorance of the stakeholders about the contents of the policy might be a threat during implementation, as they have various ideas that may not be in the line of the policy." If the policy document is not widely publicized, it could not be implemented according to the proper strategy, some of them added. One of the Key Informants stated that many approaches may be kept outside because of ignorance and they may consider the policy as a narrower approach than NPAN. The strategies are important to make familiar of the policy. Time target planning and non-equal flow of fund as well as progress may be a threat. Although there are safety net programs to alleviate poverty, its dimension spreading over the country and lack of nutrition education may be the threats of policy implementation.

- **Lack of Resources for BNNC**

Lack of fund allocation for implementation of the policy has created lot of problems. Because of non-availability of fund for dissemination of the policy, many people are ignorant about the contents of the policy. A few respondents during in-depth interview stated that many plans have been suggested in the NPAN, but because of lacking of resources (both financial and technical) projects cannot be formulated and implemented. Different sectors are proposing the BNNC for technical and financial support of their sectoral nutrition projects, BNNC could not pay positive attention to their proposals. Lack of fund flow from the government and donors in time might also be the possible threats. Some of them said that the appropriate status and authority of BNNC might be the possible reason of not getting funds from donors. The focus group participants added that lack of a Nutrition Information and Documentation Center in the BNNC would be barriers of proper monitoring and implementation of the policy. It was also mentioned that inadequacy of financial and technical support for the implementation of the policy throughout the country would be barriers, but if the Government were fully committed then

it would not be a serious problem. Among other threats to policy implementation the participants identified weak management and support of the Government officials and lack of strong coordination. They also stated that all these threats/barriers are not so strong and could be overcome with positive steps.

- **Lack of Trained Personnel and Management Capacity**

A few of the discussants afraid of possible threats that there are not enough trained and qualified nutritionists and experts in the country and so implementation of the policy and programs throughout the rural areas would be difficult. Few of them added that lack of enough weighing and measuring equipment to identify nutritional status through out the country is a big problem now. Some of them also stated that the policy has a very ambitious goal, but the country has very little trained manpower and expertise in nutrition, which may be threat during policy implementation. Diversification of donor's support is also a barrier particularly for multisectoral nutrition, it should be channeled under one umbrella, e. g. BNNC, and many key informants informed it. Delay in passing through the tunnel, lack of trained nutrition manpower (HRD), lack of strong supervision of the nutrition related field workers (Health Assistants, Family Welfare Visitors, Family Welfare Assistants, Block Supervisors, etc.) and lack of strong coordination are also described by the Informants as the barriers of policy implementation.

A few Key Informants also stated that there are no technical problems, but management of the nutrition programs through which policy could be implemented is a barrier. Some of them opined that efficient management of the programs on nutrition is essential, but there is scarcity of suitable and efficient manager and frequent transfer of the best manager form one sector to another in the country may be possible threats of the policy implementation.

This statement was confirmed during focus group meetings. The Informants also stated that all these barriers could be removed easily if we really mean business and take responsibility.

One participant informed that at present post harvest loss in Bangladesh is more than 40 %, in India 30%, while in Pakistan it is 35%. That means, farmers are deprived of return of 40% of their produce, consumers are deprived of 40% of their micronutrients, which needs to be reduced. Almost all the group members agreed that post harvest loss should be minimized for availability of food. Most of the group participants identified lack of adequate qualified manpower and adequate fund might be the barriers of implementation of the policy.

- **Tension Between Technical People and Bureaucrats**

A few Key Informants said that the threat may be the conflicts between the technical groups; the doctors group may claim that it is their business, agriculturists may say it their property, even the biochemists group may claim the same, and other technical groups also loud their voices in same tune. This is not true; nutrition requires all professionals' participation. But again, at the initial stage there may be some misunderstanding which could be overcome by good communication among the groups. One Key Informant said that the funding agencies and donor communities have their own conceived idea about nutrition, they discuss with the policy makers to reach their target and not with the professionals. They have free and frequent access to them (policy and decision makers) and the policy makers are convinced with their ideas ignoring the professionals, resulting conflicts between the professionals and the policy makers (sometimes, bureaucrats). Besides, a few of them identified conflicts among the professionals (disciplines, like doctors, non-doctors, biochemists, agriculturists, bureaucrats, etc.) about the leadership as possible threats. But these are not so serious threats to implement the policy. These possible threats

could be mitigated through frequent discussions among them. But if we could not implement the food and nutrition policy, and even if it is late to implement the policy, then we have to suffer.

- **Vested Interest**

The Key Informants and the group participants opined that there is no potential threat of the policy because it has created a congenial policy environment in the country involving participation of policy makers, professionals, government and non-government officials and beneficiaries. No policy can satisfy everyone, it would go in favor of some people and again it would go against some vested interest group as stated by majority of the informants. Many of them said that they have to see whether it is beneficial to the majority of the population or target groups. The policy is prepared to serve the whole population, so it cannot go against the poor community, the broad-based target group, the mother and children. In fact they are economically, socially and biologically vulnerable. They also stated that when a policy is being implemented it faces some threat. They cited, for instance, enforcement of laws for breast milk substitutes and edible salt iodization, all these will go against some business groups and they are very active. But this is not unique in Bangladesh, this is a global problem. Politically there is no threat; rather they should use it as a political agenda to become popular, few of them stated. Introduction of every new thing faces challenges and there are position and oppositions, beneficiaries and victims, and also vested interest groups. The policy generally implemented through plans and programs; and sometimes it requires legislative measures. Whenever an Act or Ordinance or Regulations are formulated for the benefit of the majority people and the country, some industries, companies or farms are sufferers to achieve their vested targets, so they became as threat. The examples have already been cited in the previous chapter as demonstrated by the respondents of this study. Two discussants opined that laws are not always

effective to implement policy decisions. Therefore, the threats of any policy could be removed by appropriate actions, like regular motivation, dialogue and discussions. One Key Informant stated that another potential threat was there among the donor communities, that has been changed a bit; such as, nutrition is whose business, every donor wants its ownership but nobody takes the real responsibility; so there were lot of competitions. Some informants said that nutrition is totally a preventive measure and so the curative-biased physicians may be a threat as they have experienced some problems while formulating the edible salt iodization ordinance and implementing the universal iodization of salt project. The curative-biased physician having expertise in Surgery though that the preventive measures for the control of IDD may be an action against his surgical profession.

Many Key Informants and focus group participants opined that we have to struggle against these threats. They added that even during the construction of Jamuna Bridge, question was raised about the job of the boatmen, sufferings of fishery due to low water level in nearby ponds, etc. Alternate strategies have been undertaken, the people have found out the ways and they have already made alternate choices. The new program, NNP will require four years of employment generation opportunities, there might not be any threat. They also added that during introduction of soybean oil or iodized salt, the opponents made propaganda against them that medicines are added with the oil and salt to reduce population growth. All these threats or barriers have gone through motivation of the people.

- **Discontinuity of Political Will/Commitment**

Definitely the Government owns the policy document and everybody will take real responsibility to implement it, the focus group participants expected during discussions. They seriously mentioned that the continuity of political will and

commitment in policy formulation, implementation and updating is essential. If it is lacking at any stage, this might be a big threat. A few Informants stated clearly that if political commitments are available and the policy is considered as a political agenda, then there would no longer be any threats of the policy and thus we have to find out the strategy of overcoming the possible threats. Lack of firm and continued commitments of policy makers and different sectors are the barriers of implementation of the policy. Some of them stated that changes of political parties in the government might discontinue political commitments, which may affect as threat of policy implementation.

Most of the information collected from focus group discussions on the opportunities to implementing the policy has conformity with the information given by the Key Informants during in-depth interview. The respondents also compared between opportunities and threats. They stated that there are more opportunities of the policy implementation than the threats. Therefore, the identified opportunities of the policy could be utilized by taking appropriate measures in time. The policy keeper could play a big role to implement the policy in right direction and minimize the threats suggesting appropriate measures.

5.5 SWOT Analysis of the Policy Development and Implementation

Based on the foregoing discussions on various aspects of development and implementation of the national food and nutrition policy of Bangladesh and considering other information gathered for the purpose of the study, a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis on the effectiveness and suitability of implementation of the policy is done.

In the SWOT model, the strengths and weakness are internal environment to the implementation of the policy and opportunities and threats are the factors external to the implementation of the policy.

The most transparent **Strengths** of the policy implementation lie in the fact that it is a consensus document emphasizing human rights; it is formulated by multisectoral approach involving all sectoral leaders and stakeholders concerned for nutrition; and thus, it will complement to other policies of the Government with ownership; it has broader goals and objectives with wider coverage which are achievable; and also it is an enabling document.

The major **weaknesses** of the policy implementation include lack of implementation, monitoring and evaluation guidelines; lack of strong commitment and earmarking of fund; policy-keeper's inadequate leadership, authority and support; ambitious target and that the policy ignored the lessons learned.

The major **opportunities** of policy implementation include social mobilization of the policy to make aware of the contents of the policy; wider scope of the policy to act according to necessity; it has suggested programs and measures to improve nutritional status; the policy environment is congenial; and has modification scopes.

There are, however, some **threats** of policy implementation as well. These are lack of knowledge about the policy; lack of resources for BNNC; lack of trained personnel and management capacity to implement policy, plans and programs; tension between technical people and bureaucrats; vested interest of business companies; and discontinuity of political will and commitment due to changes of political parties in the Government.

It was also observed that there are ***more strong strengths*** (i.e., consensus document emphasizing human rights, formulated by multisectoral approach, complementary to other policies of the Government with ownership; broader goals and objectives with wider coverage, and enabling document) of implementation of the policy than the ***weaknesses*** (i.e., lack of implementation, monitoring and evaluation guidelines; lack of strong commitment and earmarking of fund; policy-keeper's inadequate leadership, authority and support; ambitious target and that the policy ignored the lessons learned).

Also, there are ***more opportunities*** (i.e., social mobilization of the policy to make aware of the contents of the policy; wider scope of the policy to act according to necessity; suggested programs and measures to improve nutrition status; the policy environment is congenial; and has modification scopes of the policy) than ***threats*** (i.e., lack of knowledge about the policy; lack of resources for BNNC; lack of trained personnel and management capacity to implement policy, plans and programs; tension between technical people and bureaucrats; vested interest of business companies; and discontinuity of political will and commitment due to changes of political parties in the Government).

The development and implementation of the policy was proved effective while the strengths and opportunities were used together, as this is the best strategy. Examples of such events were that of the preparation and approval of multisectoral national plan of action for nutrition, formulation and implementation of Bangladesh Integrated Nutrition Project (BINP) and subsequent preparation of the National Nutrition Program (NNP) with multisectoral participation in the country (Ref: In-depth Interview). Besides, the example that cited by another Key Informant on the visit of the World Bank President in Bangladesh in 1998 to see the developmental works is important. The President's visit was effective and useful for the country while an opportunity was made to observe the BINP activities at Banaripara Upazilla (sub-district) of Barisal district. The World Bank President was impressed to see the project activities, such as, community participation, Community Nutrition Promoters (rural women volunteers) role in nutritional improvement of children and mothers, growth monitoring and promotion, supplementary feeding, etc. The President wrote a letter to the Prime Minister of Bangladesh stating the Bank's interest to finance a nutrition project like BINP to cover the whole country. The preparation of NNP and its phase-wise implementation is the outcome of the visit of the President, World Bank. Here, the strengths of the Government's commitment towards implementation of the food and nutrition policy were utilized with an advantage of the opportunity of the

World Bank President's visit. It is planned that the National Nutrition Project will be implemented in 139 Upazillas of the country.

The endorsement of the focus group participants that "this policy is fortunate that the individual sectoral policy makers were involved in its formulation process and so they have the ownership and responsibility to implement it through their sectoral policies, plans and programs." This is true, because the stakeholders are now implementing the sectoral nutrition plans through nutrition programs.

Therefore, with positive and appropriate utilization of opportunities for the implementation of the national food and nutrition policy, the weaknesses of its implementation can either be eliminated or be converted in to strengths and as a consequence, influence of threats can be minimized. The inter-relationship among SWOT components, which has already been described in Table 3.2 of chapter 3, is useful here.

Although the threats are not so strong against implementation of the policy, but it cannot be ignored. Opportunities could be utilized as much as possible involving the beneficiaries, the community, all stakeholders, professionals, donors and development partners through regular dialogue and dissemination of the policy activities. The most desirable strategy of efficient and suitable implementation of the national food and nutrition policy of Bangladesh would be the utilization of strengths to take advantage of opportunities. It would otherwise mean, minimizing threats, utilizing opportunities to remove weaknesses and to improve upon the strengths.

It might also be mentioned that the internal and external environments of implementation of the policy are not static, they are dynamic. The environment of each of the components (strength, weakness, opportunity and threat) may be changed by the strong influence of the others. The policy makers and strategists need to prepare several SWOT matrices at different points in time to assess the continued effectiveness. Thus it would again require a more concerted effort of the

stakeholders for effectively and suitably implementing the policy guidelines, since it is a continuous process. There is no scope of complacence, until the problems of malnutrition are drastically reduced by the effective implementation of the policy guidelines.

The information on the effective development and implementation of national food and nutrition policy was collected by a qualitative approach, starting from using the observation technique by a check-list, in-depth interview of Key Informants and focus group discussions. The methods are adequate and very useful for collecting the information. Many information collected by the observation technique have also the conformity with the information gathered from the in-depth interview and focus groups discussion.

It may be noted that the Key informants and the focus group participants were chosen from different categories, such as, policy makers, policy implementers, academicians and conscious beneficiaries of the policy. Not only that they have the familiarity of works with different environment, such as, Government, non-government, and private organizations and academic institutions. Therefore, their responses might be different, particularly among those who are involved in the policy formulation and implementation process, their responses on different issues are quite different than the responses of the conscious beneficiaries, who never participated in any process. The information collected during in-depth interviews with Key Informants and focus group discussions were very interesting. Because the repetition of information have started coming occasionally during the interview of few Key Informants and two focus group discussions. But interviewing of 7 to 9 Key Informants of each group almost every information was repetition. Similar things happened after 4th group discussion session of the study. However, there was flexibility in data collection, which is a pre-requisite of qualitative research and scopes of getting explanations and clarifications of the responses/opinions of the respondents.

5.6 Evaluation of Effectiveness and Suitability of Policy Development and Implementation

The elements of 'success' in policy development and implementation are described in section 1.4.6 of Chapter 1. Bangladesh is committed to improve the nutritional status of its population. The effectiveness of the development and implementation of the policy could also be evaluated by applying appropriate judgement on the performance already made and following the criteria given by Halcrow (22) that "the ***elements*** of policy involve the ***goals*** that may be established, the ***means*** that may be used to reach the ***goals***, the ***implements*** such as agents that activate or control the means, and the ***constraints*** that are applied to the plan or program." Again Helsing (51) presented these elements in a comprehensive framework of holistic homonculus of nutrition policy.

The ***goals and objectives*** of the national food and nutrition policy of Bangladesh were set by consensus considering the available information/data in the country and also the capability of the country to meet them. Information and data on different aspects of nutrition were available from different sources (already important data sources described in chapter 2) that have been used as base to analyze the nutrition situation during the formulation of the NFNP and NPAN. It indicates that the policy has important goals and objectives, which are established by the policymakers and the stakeholders to make a positive change towards improvement of nutrition in the country. The food and nutrition policy of Bangladesh will never be static, it will be changed according to the necessity depending on the data available from the information system. Even the policy goals and objectives might be changed on the changed situation of nutrition in the country. Because the Bangladesh Government is quite convinced and has paid good attention to recognize nutrition as human right and accordingly undertaking several projects for nutritional improvements. The Government is paying cash money (though it is small amount) to the elderly for their social security and providing free education of the girls up to secondary level, which might have

impact on nutritional improvement. In the mean time, BNNC has suggested the STC to update the nutrition data included in the policy. Therefore, the objectives and data are quite consistent to the symbolic ***feet*** of the homonculus upon which they are based and constitute the basis of the policy as stated by Helsing.

The ***means*** that may be used to reach the goals and objectives is important. A number of policy guidelines have been recommended by various sectors with consensus to reach the goals and objectives of the policy. Nutritional activities of different sectors that would be required under each guideline have also been reflected in NPAN. The NPAN (71) has clear directives for each and every sector. The responsibilities of different sectors on nutritional activities have been mentioned. The stakeholders jointly identified the important policy guidelines and nutrition activities that would be required to attain goals and objectives of the policy has certainly proved their commitment, ownership and responsibility of implementation. The commitment was reflected while the projects or programs like Intensification of cropping system, Crop diversification to increase food production for food security, Bangladesh Integrated Nutrition Project, National Nutrition Project, Universal Salt Iodization Project, Vitamin A capsule distribution project, Home Gardening, Food-for-Education, Vulnerable Group Development, Food-for-Work Programs are implemented in the country by different sectors. These program or activities are the strong symbolic ***arms*** of the humanoid body of the homonculus.

The ***implements*** such as the Bangladesh National Nutrition Council (policy-keeper) and other stakeholders for nutrition (different sectors such as agriculture, health, food, fisheries and livestock, education, etc.) in the country have sensibly activated the means. But the BNNC has not enough authority and control over the means (activities and resources) to achieve the goals of the policy. The efforts taken by BNNC for the formulation of the national food and nutrition policy in Bangladesh took longer period of time (from 1989 to 1997). The policy was formulated with leadership of BNNC and the generous multisectoral approach,

which is excellent. The policy process experienced many events that have been organized to come to consensus on many decision-making points through conflicts and compromises. The process enhanced everyone's tolerance capability to bear with others important ideas and familiarity with the views of different sectors. The stakeholders fight for their own interests from the policy and sacrificing some of those for the interest of the people is an important learning. The policy formulated and implemented with such importance, courage and zeal has been an effective and suitable policy without any doubt.

Considering the serious consequences of the declining trends of nutrients consumption in Bangladesh during 1974-75, the Government of Bangladesh established the advisory body for nutrition, the Bangladesh National Nutrition Council in 1975, with the mandate of formulation of national nutrition policy for the country. This showed the foresightedness of the Government to implement the constitutional right (1) of the people of Bangladesh. Initially a 'nutrition policy and programs for Bangladesh' was formulated and approved by the National Nutrition Council in 1983 and published in 1984 (11). And finally the formulation of the 'national food and nutrition policy' of this country started in 1989 and received its approval at the BNNC and the Council of Ministers (Cabinet) in 1997 (13). The national food and nutrition policy is now a Government policy having approved by the highest authority, the Cabinet of the Government. The enthusiasm among the stakeholders towards elimination of malnutrition from the country (which was possible due to frequent consensus building workshops for nutrition) and the instrumental role of taking deliberate actions of the members of the Standing Technical Committee (STC) of BNNC, made it possible to formulate the policy. It is also obligatory of all stakeholders to implement the policy guidelines, however, any changes required for the updating of the policy requires the consensus of the stakeholders and also concurrence of the Cabinet. The excellent policy environment is very useful for implementation of the policy guidelines.

Initially the national plan of action for nutrition (NPAN) has been formulated (71) by multisectoral approach in the light of the policy depicting the sectoral plans and programs that need to be implemented with time frame (In-depth interview and focus group). There is no indication of budgetary allocation that would require implementing the NPAN as well. However, the country's national development plan (1997-2002) has included nutritional objectives and plans in the different chapters of most of the sectoral plans with budgetary indication (74). The inclusion of plans following the policy guidelines and many successes of the policy implementation has been described in policy progress section of chapter 4. Although the budgetary allocation for nutritional development in Bangladesh (0.03% of GNP) is observed very low and far less than the recommended 0.5 percent of GNP for developing countries. Even the allocation is lower than the allocation of India (0.3% of GNP) and Sri Lanka (1.0% of GNP) (Key Informants). The allocation is gradually increasing, because of the necessity, progress of activities, political and donor's commitment.

The resources, such as, financial, technical and managerial were taken in to consideration during the formulation of the policy. Availability of inadequate sectoral resources was found to be the ***constraints***, the sectoral priorities do not allow additional fund for nutrition due to exhausting of the indicative sectoral budgets. Sometimes the implementation of plans and programs is dependent on the donor's commitment in developing countries in terms of financial resources. Among other ***constraints***, such as, poverty, food insecurity, inadequate health services and caring practices were also carefully analyzed during formulation of the policy and these have been applied to the plan or programs in the country. Although many of the plans have been recommended, included in national development plan (1997-2002), a good number of projects are yet to be developed. The concerned sectors are expressing for assistance from donors and technical support from BNNC. Coordination of nutritional activities is done by BNNC at the Council and Executive Committee of BNNC meetings. There are integration of

decisions, thoughts and ideas of Ministers, bureaucrats, and professionals in these meetings. The performances of different sectors are reviewed in the meetings of the Intersectoral Steering Committee for NPAN. Strong coordination and review of sectoral activities improves the performance of individual sectors towards developing sectoral nutrition projects/programs on priority basis with technical and financial resources. The donors like, UNICEF, FAO, WFP, UNDP, WB and others attend these meetings as observer and commit to provide supports, when necessary. The individual sectoral performances of nutrition activities are done by the Working Groups of individual ministry, headed by the Secretary/Head of the Ministry/Bureau. This is in line with the success element as illustrated by the ***head-*** and the ***guts*** of the humanoid policy body (Figure-1.1).

Some respondents during in-depth interview and focus group discussions informed that money is not a problem to implement a program but its effective management is a crisis. They cited example of BINP implementation that because of weak management the project could not achieve much success as expected when the project was extended up to 40 Upazillas. But the progress of BINP was quite satisfactory within the initial 6 Upazillas. The policy has very important goal and objectives, but the country has very little trained manpower and expertise in nutrition, which might be problem during total policy implementation. Diversification of donor's support is also a barrier particularly for multisectoral nutrition, it should be channeled through one umbrella, e. g. BNNC, informed by many respondents. Lack of strong supervision of the nutrition related field workers (Health Assistants, Family Welfare Visitors, Family Welfare Assistants, Block Supervisors, etc.) and the respondents as the barriers of policy implementation also describe lack of strong coordination.

The BNNC has no resources even for socialization of the food and nutrition policy, i.e. dissemination of the contents of the policy among all people starting from Parliamentarians, political leaders, senior administrators, bureaucrats, local leaders, religious leaders, community leaders, school teachers, and mothers. It is

not functioning like other National Nutrition Councils in the world, which have now enough executive authority, resources and also accountability. But all those National Nutrition Councils also faced the same problem initially. The stakeholders in Bangladesh have the opportunity to exercise authority, but sometimes because of ignorance or preconceived ideas they have no will. However, the Secretariat of BNNC somehow tries to disseminate the policy guidelines during new nutrition project/program formulation workshops/meetings and while the Planning Commission invites BNNC in project review/approval meetings. Planning Commission and other Ministries sometimes invite BNNC Secretariat to examine the nutrition or nutrition related projects about its conformity with the policy. The dissemination of the NFNP among the people of all categories is essential for effective and suitable implementation and continued commitment.

It is understood from in-depth interview and focus group discussions that the policy makers did not think about the financial aspects for implementation of the policy so much but they seriously thought about the necessity of the policy towards improvement of the nutritional status of the population. Despite so many constraints, the national food and nutrition policy of Bangladesh has achieved at least some good successes. During the last decade nutrition got its momentum when the BNNC is reconstituted, NFNP and NPAN is approved and some successes are observed. The impressive positive results of the projects and programs to the nutritional improvement, particularly, increase in food production, rice, vegetables and fruits; reduction of underweight, stunting, infant mortality, success of BINP in reduction of severe malnutrition; reduction of micronutrient malnutrition (vitamin A and iodine deficiency Goiter) have encouraged the policy makers, planners and programmers and even the donors.

Chapter 6

ANALYTICAL REVIEW OF THE SELECTED FOOD AND NUTRITION POLICIES OF DEVELOPED AND DEVELOPING COUNTRIES

CHAPTER 6

ANALYTICAL REVIEW OF THE SELECTED FOOD AND NUTRITION POLICIES OF DEVELOPED AND DEVELPING COUNTRIES

6.1 FOOD AND NUTRITION POLICIES OF DEVELOPED COUNTRIES

The food-rich nations, having sufficient resources to provide their entire population with a healthy diet- generally agree on the direction of national dietary changes. Among the developed countries that have formulated successful food and nutrition policy for the healthy lifestyle of the population and the literature available to study, is that of United States of America (USA), Australia and Norway. These are food- rich countries in the world and the policy formulation process, implementation and progress of these countries may provide important insight to the researcher for analyzing and comparing those policies with that of Bangladesh policy. Besides, statements on "the multisectoral problem of over-nutrition in food-rich countries is tied to the solution of undernutrition in food-poor countries (21)" have also encouraged the researcher to review and analyze the process of policy formulation, implementation and the progress of these developed countries, which are described below:

6.1.1 AMERICAN FOOD AND NUTRITION POLICY

The United States of America is largest developed and food-producing country in the world. The country is committed to providing nutrition security and enhancing the nutritional well being of the public through actions by Federal, State and Local governments and by non-governmental organizations like private industries, non-profit organizations, and religious groups. All these efforts helped to adapt food and nutrition system by the wide community variations within the nation. Every year about $40 billion is spent in nutrition assistance intervention programs alone, and many more millions are spent on nutrition education,

monitoring, research, and nutrition related programs (142). These investments show a strong national commitment of the government to the nutritional security of the people.

6.1.1.1 Policy Formulation Process

Under the U.S. government system, a political process establishes national nutrition policy. Federal commitments on nutrition appear as legislation established by an elected Congress and President. Federal agencies usually issue regulations for public comment that, after revision, are issued as final regulations (142). The National Academy of Sciences (NAS) has recognized nutrition and food sciences as the most interdisciplinary of all sciences (143). Several departments of the Federal government are involved in nutrition relevant activities: especially the Departments of Agriculture (USDA), Health and Human Services (DHHS) and the Environmental Protection Agency (EPA). Because of multisectoral partnership, there are a number of separate authorizing laws and implementing regulations. The compiled set of these laws composes the legal framework in America that is a major part of the Federal Government plan of action for nutrition. Coordination of nutrition monitoring and research activities across Government and periodic review of the Dietary Guidelines for Americans are authorized by P.L.101-445, the Nutrition Monitoring and Related Research Act of 1990. The USDA played key-role in formulating different legislation relevant to nutrition, conducting basic human nutrition research, focusing on food and nutrition and agricultural marketing. The 1995 Farm Bill Guidance outlines fundamental principles of public policy in relation to food and nutrition (144).

In America, the National Nutrition Monitoring and Related Research Act of 1990 has established the National Nutrition Monitoring and Related Research Program. Under the provision of this Act, an Interagency Board for Nutrition Monitoring and Related Research has been formed, which has developed the Comprehensive Ten Year Plan for Nutrition Monitoring and Related Research (145) to serve as a blueprint in developing Federal work plans and agency budgets.

There is a nine-member National Nutrition Monitoring Advisory Council that serves as an advisory mechanism on nutrition monitoring. This council provides critical data through a continuing process of the monitoring program to formulate or update the nutrition policy.

The chronological events in the field of nutritional developments in USA have been shown in Table 6.1.

Table-6.1: Chronological Events on Nutritional Activities in the United States of America (1950-99)

Period	Nutrition Situation	Nutrition Services
1950s-1960s	Foods abundantly grown, but many people were malnourished in the lower economic classes both in urban and rural areas.	Food production increased through technological advancement; Creation of awareness about healthy lifestyle. Applied Nutrition Program; Food and Nutrition Security Services to the target group.
1970s	Recognition of the prevalence of malnutrition, faulty eating habit, anemia, vitamin A deficiency and IDD as major nutritional problems of public health importance.	Nutritional education program through schools and communication media. Special Nutrition Program for the targeted population. Prophylaxis against Anemia, Vitamin A deficiency and IDD.
1980s	Nutritional status of the Americans was not good due to overnutrition, obesity, and nutritional disorders. Nutrition and food science recognized as the most interdisciplinary of all sciences by the National Academy of Sciences.	Dietary guidelines for Americans developed in 1980 and revised in 1985. Involvement of several departments of Federal Government in nutrition related activities. Efforts for authorizing a number of laws and implementing regulations for nutrition and adoption of the National food and Nutrition Policy through multisectoral approach.
1990s	Rise in obesity, low intake of fruits and vegetables rich in dietary fiber. Nutrition security and enhancing nutritional wellbeing considered as the policy objective.	Dietary guidelines for Americans were revised. Nutrition Monitoring and Research Act adopted and reflected in the National School Lunch and Breakfast program. The 1995 Farm Bill Guidance outlines fundamental principles of public policy in relation to food and nutrition. Reflection of the policy in National Plan of Action on Nutrition and sectoral plans. Nutrition programs are being undertaken at different levels.

6.1.1.2 Policy Implementation Process

Most of the nutrition programs are federally funded, but most planning and implementation of nutrition relevant programs are actually handled by State and local health and welfare departments and education departments. Numerous private organizations and many individual food companies are also engaged in nutrition-related activities. Federal policies are delineated in documents adopted by the executive departments and agencies and by multisectoral partnerships. The dietary guidelines for Americans (146), that developed in 1980 and subsequently revised in 1985, 1990 and 1995 serve as the central focus of Federal dietary recommendations. These guidelines ensured both government and non-government agencies to 'speak with one voice' on nutrition issues. The Nutrition Monitoring and Related Research Act which was enacted in 1990 has made provision of reviewing the Dietary Guidelines in every 5 years on the basis of current scientific evidence. The revised American guidelines were issued in January 1996 (142). The meat and dairy producers have created continuous pressure on the U.S. Department of Agriculture to withdraw its Eating Right Pyramid food guide and ultimately it was withdrawn in 1991. It was a long series of industry attempts to influence the federal dietary recommendations. These attempts began when diet related health problems in the United States shifted in prevalence from "eat more" to "eat less." The Pyramid controversy focuses attention on the conflict between federal protection of the rights of food lobbyists to act in their self-interest, and federal responsibility to promote the nutritional health of the public. It is interesting to note that the Department of Agriculture has the conflict of interest because of its dual mandates to promote agricultural products and to advice the public about healthy food choices (147).

The Department of Health and Human Services (DHHS) has developed a key policy document with multisectoral participation, Healthy People 2000: National Health Promotion and Disease Prevention Objectives (148). This policy was revised in 1995 following the midcourse review (149). Among the 300 objectives, 27 are nutrition related and many others, including those on physical

activity are nutrition relevant under the broad ICN concept of nutrition. All these objectives provide a framework for nutrition actions at local, State, and Federal level (142).

The first Surgeon General's Report on Nutrition and Health (150) is another important policy document that highlighted the over-consumption of certain dietary components (particularly fat) as a major public health concern of Americans. The USDA domestic food assistance programs fund the development of State plans of operations for the different domestic nutrition assistance and nutrition education programs. These plans accompanying budgets, which are subject to the approval of USDA, serve as the basis for Federal funding of State-administered nutrition assistance and nutrition education activities.

Food consumption surveys have been ongoing in America since 1930s, and nutrition monitoring on a national basis began in the 1960s. In 1966, Congress passed the Child Nutrition Act, shifting food assistance resources to children in poor areas, whose nutritional needs were presumably greater (44). Systematic coordination of various components started in the 1980s with the establishment and the implementation of the National Nutrition Monitoring System. The actions have led to closer coordination among the components of the system and to periodic report to Congress on nutritional status of the population.

6.1.1.3 Policy Progress

There have been major achievements in America in improving the nutritional status of the population. The nutrient deficiency diseases that were once prevalent are now almost unknown within the borders. Severe protein-calorie malnutrition is usually limited to cases of child abuse and neglect and debilitating diseases and illness. The diets of most Americans either meet or exceed the Recommended Dietary Allowances (RDA) for many important nutrients, including protein, vitamin C, thiamin, riboflavin, and niacin (151). A significant improvement have been achieved in infant iron nutrition in the past two decades, resulting in the reduction of iron-deficiency anemia among children.

Limited success has been achieved in addressing overweight and dietary excesses of fat, saturated fat, cholesterol and sodium that have been linked to chronic diseases like coronary heart disease and cancer. Healthy People 2000 midcourse review data indicate that only 22 percent achieve the dietary goal for total fat and only 21 percent for saturated fat (149). Overweight has increased dramatically over the past decade and now over one third of adults, or 50 million people, are overweight (152). Overweight is also increasing in children. The prevalence of overweight for children ages 6-11 is approximately 22 percent that represent 7 percent point increase over the last 10 years (153). Twenty one percent of adolescents having age 12-19 years are overweight, which is an increase of 6 percent over the last decade (154). A national study on school children found that the average caloric intake on school days was 11 percent above the level suggested in the RDAs (155). Another study conducted on the kindergarten students' understanding of the concepts of dietary guidelines for Americans and their food preferences. They understand general relationship between food choices, exercise, body fat, and health. But their food preferences were not consistent with the recommendations of dietary guidelines to moderate foods high in salt, fat, and sugar (156). A study on 52.5 hours children's Saturday morning television programs, telecast in five major networks, advertised 997 commercial products. Out of 564 advertised food items 43.6 percent foods was classified in the fats, oils, and sweet food group. These foods as exposed to the children are against the recommended healthful eating for children (157). The rise in obesity in America has been termed as an epidemic (158). The consumption levels of fruits, vegetables, and other foods rich in dietary fiber are increasing (159), but it is still considerably below the levels that may help to prevent certain forms of cancer (160). Average intakes of vegetables, fruits, and grain products are less than recommended. Considering the importance of nutrient contribution of whole grain products, it is recommended that several servings of whole-grain products be included in all diets each day (161). Nutrition policy influences consumers' attitudes and choices. Food and agricultural policies can accelerate the process of

adapting the production and distribution systems for agriculture and food to better meet the demands of the more informed consumer's (162). Although breast-feeding is the optimal method of feeding almost all newborns and is promoted by Federal policy, only slightly more than half of U.S. mothers choose to initiate breast-feeding, and the rate is lower in some sub-populations, especially African-Americans (163). Among the mothers who did not breast-feed their child in the first 6 months of life, almost all fed infant formula, and only a small proportion used cow's milk as a substitute for either breast-milk or formula (164).

National studies reported that 2 to 4 percent American households sometimes or often do not have enough food, indicating that 5 to 10 million individuals live in households that report food insufficiency. Ten to 16 percent of low-income households with income below 131 percent of poverty (For a family of four, includes annual income up to $19,683) are at greater risk of food insufficiency (165). It was also estimated that 4 million young children experience hunger at some point during the year (166). In the United States in 1996, 5.5 million children were living in poverty, and it is reasonable to surmise that a goodly number of them were relegated to the street (167). The Urban Institute found that 1.5 million elderly Americans report at least one of four food insecurity indicators in the previous six months (168).

In the United States, the enormous escalation of the military budget in the 1980s was carried out at the expense of social needs (169). Sivard had listed (in 1986) many consequences of the budget decisions (170), among them an estimated 20 million Americans were without adequate nutrition on a regular basis.

6.1.2 AUSTRALIAN FOOD AND NUTRITION POLICY

Australia is one of the developed food-rich and food-exporting nations of the world. About 40 percent of the population were either born overseas or are the children of that born overseas (171). Australia is a highly urbanized (86%) medium sized industrial country (172). For each of its 16 million inhabitants there are approximately 30 hectors of farmland, but only 1.2 of these lands are cultivated

for crops (173). Only 6 percent of the workforce are engaged in farming (174). Enough food is produced to feed around 35 million people (175) – more than half of them overseas. The Australia has plenty of safe and nutritional food supply. It is also a great concern that the general population suffer from diet related diseases causing unnecessary early death and illness.

6.1.2.1 Policy Formulation Process

The Australian government has a clear mandate for the promotion of public health and the achievement of social justice. Its role is to coordinate, monitor, and regulate, if required. The policy making in food and nutrition has not escaped the difficulties, which generally characterize decision making in Australia's system of government. The constitutional constraints, which shape the division of power between federal and state governments create an extremely complex policy making environment, particularly for food and nutrition policy as an intersectoral approach is required. The chronological events on nutritional activities in Australia have been shown in Table 6.2.

The Federal government of Australia desired to improve the nutritional status of its population through healthy diets and specific interventions. The government established the National Advisory Council on Nutrition (1936-38) 'to foster the general nutrition of the rising generation' and to correct 'faulty dietary habits in general by the publication of sound propaganda' (176). Australian government has also a cherished goal to formulate a national food and nutrition policy. In 1979, the Federal Department of Health (as it then was) took a significant step when it announced a 'food and nutrition policy' (177).

The emphasis of the food and nutrition policy was centered primarily on the distribution of a set of dietary goals in 1979 and guidelines in 1982. The Australian dietary guidelines were first adopted by the then Department of Health in 1979 and consequently by the National Health and Medical Research Council (NHMRC) in 1983.

Table-6.2: Chronological Events on Nutritional Activities in Australia (1930-99)

Period	Nutrition Situation	Nutrition Services
1930s-1960s	Foods were available, but nutritional status of the people of lower socio-economic classes was not satisfactory. Faulty dietary habits exist in the country.	Food production increased; Creation of awareness about healthy diets. Applied Nutrition Program; National Advisory Council on Nutrition established (1936-38) to foster general nutrition of the rising generation.
1970s	Prevalence of malnutrition, necessity of multisectoral approach to combat malnutrition, faulty eating habits and major nutritional disorders were identified by the Federal Govt.	Nutritional education program through schools and communication media on healthy food choices easy choices. Propaganda to change faulty dietary habits and announcement of the national food and nutrition policy by the Federal Department of Health.
1980s	Nutritional status of the Australians was not good due to overnutrition, obesity, and nutritional disorders. Nutrition was recognized as an inter-disciplinary subject and thus considered to involve other concerned sectors in nutrition activities.	Adoption, distribution of a set of dietary goals and dietary guidelines for Australians by the Department of Health in 1979 and finally by National Health and Medical Research Council in 1983. Involvement of all sectors in nutrition related activities. National Better Health Program recommended by the Better Health Commission in 1985 considered nutrition as one of the five important components for better health of the Australians.
1990s	Increase in obesity, nutritional disorders, and chronic degenerative diseases; low intake of lean meat, fruits and vegetables rich in dietary fiber. Nutritional improvement through healthy diet and specific interventions is the desire of the Federal Government of Australia.	Dietary guidelines modified and endorsed in 1992. Involvement of consumers, producers, food industries in nutrition activities was a good step in Australia. Nutritional awareness through media campaign continued. National food and nutrition policy modified and adopted in 1992. Reflection of the national food and nutrition policy in to State policies, plans and programs. Nutrition programs are being undertaken at Federal and State levels.

An Over-sighting Committee was constituted under the Chairmanship of Professor Paul Nestle, Chief, CSIRO Division of Human Nutrition and other concerned 13 members, who played a vital role in developing the consensus policy for adoption by the Government in May 1992 (178).

The formulation of Australian food and nutrition policy has involved representatives from the public and private sectors, agriculture, food

manufacturing, retailing consumers and the media sectors. The multisectoral participation in policy formulation has not only reduced conflicts but also improved good atmosphere among the stakeholders in Australia. The fundamental objective of food and nutrition policy of Australia is to make healthy food choices easy choices. The government established Better Health Commission in March 1985. This commission represented the first national effort to change the basic direction of health policy in Australia. Nutrition was considered as one of the five priority actions of this Commission's recommended National Better Health Program (NBHP). And ultimately the food and nutrition policy in Australia builds on the initiatives and infrastructures arising from the development and implementation of the National Better Health Program (NBHP). This policy is to facilitate and support action through the entire food and nutrition system, which has four sub-systems, such as, food production; processing and distribution; consumption; and nutrition, to ensure better nutrition for Australians particularly for the most disadvantaged population. Heywood and Lund have suggested Coordinated activities across a number of sectors for the improvement of nutrition and health of Australians and by the facilitation of national food and nutrition policy (179). The strategies for achieving these goals have been confined almost entirely to educational activities, including a range of media campaigns. The aim of the food and nutrition policy is to increase the availability of nutritious food, especially in remote areas, to increase the affordability of nutritious foods for economically disadvantaged people, and to increase the understanding of good nutrition and foods (178).

The food and nutrition policy is closely linked to other relevant government policies, such as, food industry strategy, the support for Australian food export marketing and ecologically sustainable development. The Australian Government has completed the fundamental reform of Australia's food standards setting process through creation of the National Food Authority (NFA) and the historic National Food Standards Agreement with the States and Territories in 1991. The NFA is playing significant role in the further development of food and nutrition

policy through its legislated functions. In every step of policy formulation the concerned sectors have been consulted and their opinions were given values. Initially key issues to improve the nutritional status were identified. The policy has also identified its prime goals as to improve health and reduce the preventable burden of diet-related early death, illness and disability among Australians. The Australian food and nutrition policy included policy statement, identifying implementation objectives and strategies, and roles and responsibilities of different Departments and organizations to implement, monitor and review of the policy. The policy has four objectives, such as, (i) improvement in the knowledge and skills necessary for Australians to choose a healthy diet, (ii) incorporation of food and nutrition objectives into a broad range of policy areas and sectors, (iii) support for community based initiatives to improve the diet of people with special needs, and (iv) ongoing monitoring and surveillance of the food systems. A number of strategies to achieve these objectives have been clearly identified and included in the policy document (178).

Grossman and Webb (180) have stated that local food and nutrition policies (small-scale efforts to create food systems that responds to nutritional needs) are becoming more and more fashionable as a way of improving public health in Australia. McMillan (181) reported that a high prevalence of nutrition related diseases were found among the Aborigines living in remote areas.

The system of the government is also important in multisectoral policy planning. The division of powers not only constrains intersectoral decision-making at a practical level, but also creates an additional element of intergovernmental tensions and jealousies, particularly over funding issues (182).

The Victorian food and nutrition policy faced considerable opposition from producer interests while 'making healthy choices easy choices: towards a food and nutrition policy for Victoria'. A series of consultation days were held with interested parties like plant product producers, animal product producers, food processors, dieticians, school teachers and medical practitioners. The red meat producers and food processors were vigorously opposing the policy.

The animal products lobby objected to the lack of consultation before the policy document was produced and raised objections to the identification of unhealthy foods in the discussion paper (183). The Victorian Farmers and Graziers Association saw it as a recommendation to cut consumption of red meat, where the policy advocated a reduction in fat (184). The Victorian Employer's Federation expressed the concerns of the private sector regarding a policy which at this stage appeared to smack of state socialism and to be representative of bureaucracy and seconded experts (185). They also claimed that the policy proposals were in conflict with the government's 'deregulatory' economic policy (186). But frequent discussions did lead to the construction of some bridges. With the meat producers a critical linkage was provided by basic researchers working on the fat composition and health effect of lean meat (187) and by animal production researchers working on the feasibility and economics of producing and marketing leaner animals.

The Australian Nutrition Foundation, at a national level, saw the Victorian program as detrimental to its aim of achieving a 'national food and nutrition policy based on cooperation between government, health professionals, educators, the food industry and the consumers' (177).

6.1.2.2 Policy Implementation Process

The Australian food and nutrition policy is being implemented through strategies, which support the Australian dietary guidelines, involve key sectors in the food system, and foster community participation. The Government has sponsored or initiated several reviews of policy issues, which impact on the key issues underlying the National Food and Nutrition Policy. Among the Australian population, Aboriginal and Torres Strait Islander, isolated rural Australians, low-income households, migrant groups in the community are at risk of undernutrition. The Government gives high priority to make access to nutritious diet by more disadvantaged Australians for the sake of social justice as a part of implementation of the food and nutrition policy. The food consumed in Australia need to conform

to a comprehensive set of food standards. The NFA is responsible for developing these standards and the States and Territories are responsible for implementing and administering this food standards (178). The food and nutrition policy is a partnership of governments, industry and the community, and all are closely involved in its development and implementation. Effective implementation of food and nutrition policy requires food producers to increase their skills related to knowledge of dietary issues and apply these to product development; food marketers to understand nutrition issues and consumers perceptions; Government to support and promote the Australian dietary guidelines; community and social welfare groups to be aware of the nutritional needs of their clients and educators to teach the nutritional benefits of foods and the link between food and nutrition. Therefore, the policy needs to be wide ranging and the impacts of individual programs are examined throughout the food and nutrition system by different sectors. And resources need to be efficiently managed to ensure good health for future generations. The Commonwealth Department of Health, Housing and Community Services, as part of its Health Advancement Program, is responsible for coordinating the implementation of the policy in cooperation with other groups (178). The department has a consultative group of experts with backgrounds in the relevant industry sectors, appropriate academic fields, and community and consumer groups, which advise on various issues of implementation of the policy. The department also work closely with the NFA and other Commonwealth departments and agencies in progressing the policy. Local government planning authorities and communities have an active and participatory role in affirming and implementing policy objectives at a local level. The successful implementation of the policy depended on the strong coordination of different sectors as well as the beneficiaries.

6.1.2.3 Policy Progress

Australia is now in the forefront of international activity, particularly in food and nutrition policy, because of starting linkage with other relevant policies

of the country. The strategy of demand and supply side action, which support and reinforce food choices for a healthy diet was being made easier. The Australian Federal Government has sponsored or initiated or legislated many important review and policy document relevant to the national food and nutrition policy. In response to the World Health Organization's aim of health for all by the year 2000, a report had been prepared and published for the Australian Health Ministers in 1988, which identified various goals and targets for achieving Health for All (188). On the basis of this report the National Better Health Program was implemented in Australia from 1989 to 1992. Again the achievements and initiation of this program helped the formulation of the national food and nutrition policy.

The Victorian food and nutrition policy document outlines the rationale, dietary guidelines and implementation for a food and nutrition policy for Victoria. The policy provides an approach integrating activities of agriculture, education and health sectors. The implementation was in line with the Australian dietary guidelines (189). The progress of Australian dietary guidelines has been reviewed at regular interval. Depending on a report of the Sub-committee on Nutrition Education, National Health and Medical Research Council (NHMRC) in 1989 about implementing the dietary guidelines for Australians, it was modified and endorsed by NHMRC in June 1992 (190). This report provides strategies for disease prevention and health promotion using the dietary guidelines. The sub-committee took a broad view of traditional education techniques complemented by strategies that promote a supportive environment, addressing social, cultural and economic factors that influence nutritional status (191). The Australian government also made statements aiming at development of a fairer, more prosperous and more just society for every Australian along with the identification of disadvantaged groups and specific strategies for these groups (192). The consumers were also involved in policy review process in Australia. The consumers' views have been reported in the proceedings of food policy conferences held in 1991 and 1992 (193). These documents represent the consumer point of view on food policy and stem from an 18-month collaborative

project involving the Australian Consumers' Association and 30 other consumer, public health, community health and environmental organizations. A number of nutrition policy statements issued by the former expert Nutrition Committee of the National Health and Medical Research Council and endorsed by the NHMRC (194), which have created an awareness of the Australians and an environment of policy formulation, implementation and progress. Besides, the national health goals and targets were reviewed and modified by the Department of Public Health in 1992 (195) depending on the prevailing situation in Australia. Another important event was the presentation of the Australia's country paper on nutrition in the international conference on nutrition, which provides social and economic conditions in Australia and relates that to the nutritional status of Australians (196). The "National strategy for ecologically sustainable development" has been initiated from the highest level to improve the quality of life of the population and the future generation (197). A joint statements on Australian agri-food industries was made in 1992, which provides a national strategy to improve the international competitiveness and export orientation of Australia's agricultural and food processing industries, including further industry integration, workplace reform and market development activities (198).

In spite of so many activities and programs being implemented in Australia to improve the nutritional status and healthy lifestyles of the Australians, many people are still the worst victims of malnutrition, particularly overnutrition and nutrition-related disorders. The problem of malnutrition in Australia is nearly similar with other industrially sound countries, but different than the non-industrialized developing countries. The cases of overnutrition, obese and nutrition related disorders are the severe problems in Australia and other developed countries. As such there is no available information on undernutrition or protein energy malnutrition in their reports.

6.1.3 NORWEGIAN NUTRITION AND FOOD POLICY

Norway is one of the richest and healthiest nations and also one of the developed food rich countries of the world. The Norwegian government is very much alert and committed to its people to improve the nutrition situation through a concerted effort and accordingly took pioneering role in policy making and planning.

The seeds of its nutrition policy are more than half-century old. This country was the first to adopt a comprehensive food and nutrition policy. In the world, the Norwegian policy is considered as the most forward-looking. The global food crisis of the early 1970s has created an environment of formulation of national food and nutrition policy in Norway. Perhaps the best known model of interventionist food and nutrition policy is that of Norway (177). Therefore, policy makers and expert nutritionists of many developed as well as developing countries have looked to Norway as a model for policy guidance.

6.1.3.1 Policy Formulation Process

A conservative coalition in Norway took over for several years, and political agendas focused on control of inflation, budget and trade deficits, deregulation, and decentralization. The population was aging, affluent, highly educated, and increasingly exposed to non-traditional views through the myriad channels of Norway's mass media. Working women leading the way in establishing new family life styles, buying patterns, and eating habit (21). The chronological events on nutritional activities in Norway have been presented in Table 6.3.

National Nutrition Council (NNC) was established in Norway in 1937. It drew up guidelines for food supply and nutrition policy to promote public health and also to encourage agriculture. The council was initially at dormant stage and not represented by all concerned sectors and thus the nutrition and food policy formulation was delayed. The complex food and nutrition policy of this country, setting goals for 1990, was formally begun in 1975 (21).

Table-6.3:Chronological Events on Nutritional Activities in Norway (1930-99)

Period	Nutrition Situation	Nutrition Services
1930s-1960s	Food available, but not accessible to disadvantaged group causing malnutrition among them. Faulty dietary habits existed in the country.	Food production increased; Creation of awareness about healthy diets. Applied Nutrition Program; National Nutrition Council was established in 1937 to improve the nutritional status of the Norwegians.
1970s	Global food crisis inspired the country to grow more food to become self-sufficiency. Malnutrition, faulty eating habits, and major nutritional disorders were prevalent in the country.	Nutritional education program and media campaign on healthy food. Change in life style, buying patterns, and eating habits was possible due to working women. The approved national nutrition and food policy implementation begun in 1975 with setting goals for 1990. Health and diet, agricultural self-sufficiency, rural development, world food security, etc. were the objective of the policy.
1980s	Nutritional status of the Norwegians was not good due to overnutrition, obesity, and nutritional disorders. Consumption of adequate animal fat created problems. Nutrition was an inter-disciplinary subject and involved concerned sectors in nutrition activities.	The national nutrition and food policy revised in 1981. Information and education on the diet and health aspects of the New Nutrition initiated for the Norwegians. Media campaign helped in dissemination of nutrition information. Several sectors involved in nutrition related activities. Public campaigns, in-service training, textbook revision and best selling of popular food and nutrition books. Nutrition research programs initiated in the country.
1990s	Overnutrition, obesity, nutritional disorders, and chronic degenerative diseases were prevalent in the country. Nutritional improvement through healthy diet is tried. Self-sufficiency in food for the world food security emphasized.	Government support provides half of the income of Norwegian farmers. Involvement of consumers, producers, food processors in nutrition activities was a good step in the country. Nutritional awareness through media campaign continued. National nutrition and food policy reflected in the national plan of action for nutrition and sectoral plans and programs. Nutrition programs are being undertaken from central levels.

However, inspite of many constraints, diplomatic efforts and intensive work by the NNC representatives and Ministry of Agriculture produced a draft policy by the early autumn of 1975. It was summarized in a memorandum from the Minister

of Agriculture to the Cabinet, which in turn quickly approved it (November 1975) and transmitted it as Report No.32 to the Parliament on the Norwegian Food and Nutrition Policy, the First White Paper (199).

The nutrition and food policy was adopted in 1975. It encompasses health and diet, agricultural self-sufficiency, rural development and environmental conservation, and world food security. There were some conflict of taking leadership in formulation and implementation of nutrition policy in Norway between two major sectors such as agriculture and health. It has been continued for decades. The key players in nutrition policy formulation processes include those in the powerful agricultural system led by the ministry of agriculture and several dozens of stakeholders. The agriculture had the privilege to gain power and resources through its early alliance with vanguard health and nutrition proponents, thereby sustaining the voice of its farm constituency in national decision making. The established health sector was comparably vast but not mobilized for nutrition policy advocacy. The 1981 white paper was an attempt by health and nutrition proponents to regain control of the policy, which have been captured by the farm interests, who had taken the lead in designing the first white paper in 1975.

The NNC had been the policy keeper throughout the phases of policy initiation and adoption and also attempted to create an environment that would support the policy adoption and implementation. The policy goals and objectives were based on individual consumer needs, regional requirements, national consumption and production goals and global considerations.

Norway's efforts in nutrition and health have experienced many obstacles and opportunities for intersectoral policymaking. The ministry of agriculture and their relevant farms and food industries has the powerful economic interests in many countries. As the health ministries traditionally focus on personal health services and cost control, the health interests could not have a comparable "home". The National Nutrition Council, which is acting as the chief advocate for Norwegian National Nutrition Policy, had to work under such a situation.

6.1.3.2 Policy Implementation Process

An Inter-ministerial Coordinating Committee on nutrition consisting of members from nine different ministries was given the responsibility for long term as well as annual policy implementation concerning nutrition and diet (200). At present, the best known model of interventionist food and nutrition policy is that of Norway. The implementation of the policy in 1980s followed a 1981 policy assessment and reformulation of it as the "Second White Paper". According to Milio's view, the national goal was the central, pervasive, and persistent issue in Norway's dairy-dominated agriculture and food traditions. Their intention was to reduce total food fat energy (should it be 35% or 30% as a minority health and nutrition view sought?) and how much emphasis to be given on the reduction of animal fats relative to other widely used fats? The consequences of such decisions, if effectively carried out, had vast economic, political, and health implications. The white paper left the issue ambiguous, and the Parliament approved it without alterations. The white paper did not modify the limited funds allowed to the designated implementing and policy-keeping apparatus: the expert, but only advisory, National Nutrition Council and the ten-member Inter Ministerial Council (IMC), chaired officially by the high-ranking Deputy Minister for Social Affairs (Health). The 1981 white paper was an attempt by health and nutrition proponents to regain control of the policy, which had been captured by the farm interests, who had taken the lead in designing the first white paper in 1975 (21).

One of the important issues regarding the implementation of the food and nutrition policy in Norway is that the National Nutrition Council had the major responsibilities but it has no executive power and a minimally supportive base. Having all these difficulties, the council had contributed significantly to national changes that were in line with the policy goals. The role and interplay of National Nutrition Council with other stakeholders are important and can reveal useful strategies for similar contexts and contests. The council has played an excellent role with its supporters in more implicitly than explicit, and more trial-and-error process than planned. The experience of the policy-keeper in Norway may be

useful to other policy-keepers in developing countries to act accordingly with the stakeholders.

The less costly and politically sound information and education emphasizing the diet and health aspects of the "New Nutrition" and favoring the most powerful stakeholders' farm income and production subsidies are the two different types of policy activities. In spite of resource constraints, NNC has taken effective and sustained initiatives including public campaigns, in-service training programs for a wide variety of personnel, textbook revision, and best-selling popular food and nutrition books. The nutrition proponents long cherished policy-oriented research program was begun in 1985 and some innovative community nutrition demonstrations started.

The Norwegian National Nutrition Council recommended that solid food be introduced to breast-fed infants gradually between the age of four and six months, and not later than six months. But a critical review of Borresen stated that the alleged inadequacy of the volume of breast milk after 4-6 months is an artifact caused by the inevitable fall of milk yield induced by supplementation and unnatural time scheduling of breastfeeding (201). The council has overlooked evidence showing that voluntary exclusive breast feeding on demands provides enough energy and nutrients to most infants for at least nine months. So Borresen suggested that mothers if wish to continue breast-feeding after six months she may be encouraged to do so and solid food introduction should not be emphatically recommended until the infant is nine months old. But recently World Health Organization recommended that supplementary feeding should be started after six months of age.

According to the desire of nutrition policy, in agriculture sector, regional shifts in wheat production occurred, meat and milk production was controlled by disincentives and encouragement were given to potato growing and fish consumption through subsidies. New nutritionally good foods were introduced into the market, and quality of bread was improved. Changes in consumer food subsidies continued to favor foods that were less desirable according to policy

guidelines. The regulatory actions have improved food labeling, restrict misleading food advertisement and expanded retail food store hours in Norway.

The task of integration of the nutrition issues into the ongoing institutional arrangements and procedures are found quite difficult. The priority nutrition issues are less important or less concern in national economic and resource planning, in the deliberations of the cabinet, or in parliamentary oversight of agriculture or health.

6.1.3.3 Policy Progress

This Norwegian policy met with mixed success. By 1987, the goals concerning regional development and self-sufficiency in food has largely been met, but some of the nutritional goals have proved more elusive. The mixed success of the Norwegian policies in meeting the nutrition and health goals has been attributed to the multiple objectives.

Milio also analyzed the implementation of food and nutrition policies of Finland and Norway, which are intended to address both the supply and demand aspects of food and dietary issues. Considering the on-site studies conducted in 1990, 1987, and 1980; she has stated that mixed progress was held due in part to problems in implementation. These include: development of an effective strategic capacity for planning, advocacy, coordination, and evaluation; integration into health services and other policy sectors; development of decentralized infrastructure for deploying policy; accuracy in public information on food and nutrition; the use of government market power and social equity in the distribution of policy benefits and costs (202). Quasi-governmental sectors like research organizations have given some attention to nutrition periodically. Few corporations and societies come forward to popularize nutrition and health information. Again within the context of wider political, economic, and bureaucratic changes, a decision was taken to develop a new nutrition policy assessment, a third white paper, for parliamentary action in 1989.

The interest of the leader of a nation is also important in policy decisions. One example is that the ecological approach becomes visible in the 1987 report of the United Nations World Commission on Environment and Development. It called for intersectoral action to develop economically and environmentally sustainable agriculture in both rich and poor countries, an end to subsidized food surpluses and to their export, and a shift of food production towards food-poor countries and regions. This was possible, because the chair of the Commission and a leading proponent was none but the Prime Minister of Norway, who was a former health official and environmentalist (21).

The progress of Norwegian nutrition policy's 1990 goals was directly tied to the priorities for implementation and the size of resource allocations. By 1987, the food self-sufficiency and regional developmental goals were closest to being met in some ways. The third goal i.e. Norway's contribution to world food security could not be assessed due to its scattered evidence and lack of coordination by policy-keepers. Efforts to reach that goal were sometimes in conflict with the imperatives of self-sufficiency. Although changes in dietary habits were continuing, they were not all in the expected direction. More research on these issues would be required to make positive conclusion on the policy progress. But still the Norwegian nutrition and food policy may be used as a model for other developed and developing countries as it has experienced a lot of conflicts and compromises during its formulation, reformulation, implementation, monitoring and evaluation.

We may compare the policy activities of Australia and Norway. The Australian economic conditions and food production organizations if compared with those, which are considered conducive to intersectoral, structurally interventionist policy for better nutrition in Norway, many difficulties will become apparent. Australia has very little faith on imported food. On the other hand, nutritional objectives of Norway were harnessed to strategies designed to boost the domestic contribution to the nation's food consumption. In other words, farmers and processors would look favorably on such strategies because they not only

improved nutrition but also offered greater opportunities for expanding their industries. Government support provides half the income of Norwegian farmers' (203). Again Australia is a food exporting country, which exports more than half of its food produce. The Norwegian policy presumed that commodities, which were sold on the international market, were too difficult to manipulate in terms of prices, even domestically, because world prices were the main determinant (204).

The Norwegian policy progress may provide some useful insights, which can be used to good advantage in formulating or updating future policies of developed and developing countries on specific circumstances. The nutritional objectives are most successfully integrated with the agricultural policy in Norway, where the outcome involves incentives for producers. If this is applied in principle, opportunities can be sought which fit the local situation. This may be an advantage to both nutritional and agricultural benefits.

6.2 FOOD AND NUTRITION POLICIES OF THE DEVELOPING COUNTRIES

The developing countries have also promised to formulate national food and nutrition policies for improvement of nutritional status of their population. Among the developing countries, who have proven their excellence in successfully formulating, implementing and progressing food and nutrition policy activities, India, Philippines and Thailand have been selected for analytical review and then compare with the national food and nutrition policy of Bangladesh. The formulation process, implementation strategy and progress of policy activities of these countries have been discussed as follows:

6.2.1 NATIONAL NUTRITION POLICY OF INDIA

India's concern for nutrition started from her civilization. The guiding principles of nutrition and health have been cited in the holy books and other ancient scriptures in this country. Since the independence of India in 1947, the

Government has been striving continuously towards a better standard of life for its population.

6.2.1.1 Policy Formulation Process

Indian Constitution has made provisions of the commitment on improvement of nutritional status and quality of life. It states explicitly in Article 47 that "The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health among its primary duties..." (205).

The implementation of the constitutional statements is vested to the government as well as bindings of the policy makers and nutrition scientists of the country. Accordingly a number of nutritional activities have been undertaken in India. The chronological events on nutritional activities in India since 1950s are shown in Table-6.4.

Various phases of nutrition programs started appearing in India within the provincial health sectors from mid-30s: medical/clinical phase, food production and technology phase, community development phase, and multisectoral phase. Different types of professionals and specialists especially biochemists, clinicians, agriculturists, sociologists, and planners gradually involved and contributed in improving the nutrition scenario in India during these phases. During the mid-60s community development phase through applied nutrition program dominated the nutrition scene for 10 years. The outcome of this program was the realization of community participation and coordinated approach at different level. During early-70s, diverse nutrition program redirected toward specific nutrition deficiencies in rural, urban and tribal areas. At the time of independence India faced two major nutritional problems – one was the threat of famine and the acute starvation due to low agricultural production and lack of appropriate food distribution system. The other was chronic energy deficiency due to poverty, low literacy, and poor access to safe drinking water, sanitation and health care. The country adopted

multisectoral, multipronged strategy to combat major nutritional problems and to improve nutritional status of the population (206).

Table – 6.4: Chronological Events on Nutritional Activities in India (1951-99)

Period	Nutrition Situation	Nutrition Services
1950s	Food shortages	Food production phase: Technological advancement to improve food production; Food fortification measures to improve nutritive value.
1960s	Malnutrition most prevalent in lower economic strata. IDD as a Public Health Problem	Community development phase: Launching of Applied Nutrition Program; Mobile Food and Nutrition Extension Services; Iodization of salt
1970s-early	Recognition of chronic energy deficiency, anemia, vitamin A deficiency as major nutritional problems of public health importance	Direct Nutritional Interventions: Special Nutrition Program Prophylaxis against Anemia and Vitamin A deficiency
Mid 1970s	Recognition that infection and undernutrition were major causes of morbidity and mortality among infants and children	Multisectoral Indirect Interventions Phase: Integrated Child Development Services (ICDS); Universal Immunization Program (UIP); Oral Rehydration Therapy (ORT) Nutrition Promotion through Poverty Alleviation, Public Distribution of Food, Health and Family Welfare Measures, and Adult Education.
1980s	Felt need for nutritional bias in sectoral policies and programs	Efforts for adoption of a National Nutrition Policy
1990s	Recognition that malnutrition is an impediment to national development; its use as indicator of Development Process	Finalization of National Nutrition Policy; Finalization of the National Plan of Action on Nutrition Integration of TINP with ICDS program.

Green revolution resulted in increased food production sufficient to meet the needs of the growing population; establishment of adequate buffers stocks and

public distribution system (PDS) has ensured adequate per capita food availability and distribution at the national level (206).

The national level Integrated Child Development Services (ICDS) took birth on 2 October 1975 as the start of a multisectoral phase. This phase is remarkable in that it has increasingly become clear that malnutrition and socio-economic deprivations are virtually the cause and consequence of each other (207). In 1980s the need for nutritional bias in sectoral policies and programs were felt and accordingly efforts for adoption of a national nutrition policy were undertaken in India. The realization has led to the formulation of national nutrition policy within the framework of national development in 1990s (Table-6.4). The nutritional indicators have been used in the development process.

The Department of Women and Child Development, Ministry of Human Resource Development, took initiative and formulated the National Nutrition Policy with inputs from the concerned sectors of the Government, National Institutes in the field of nutrition and eminent experts. They advocate a multisectoral strategy for alleviating the multifaceted problem of malnutrition and achieving the optimal state of nutrition for the people. Finally, the Government of India has adopted the National Nutrition Policy in the Parliament in 1993 for implementation in the country (208). This was considered as an important landmark and one of the most significant achievements in the nutrition field in India.

The Indian national nutrition policy advocates for a comprehensive, integrated and inter-sectoral strategy to improve the nutrition scenario of the country. The strategy highlights the importance of direct nutrition interventions for vulnerable groups as short-term measures as well as various development policy instruments as long term institutional and structural changes, which will create conditions for improved nutrition.

Food production, food supply, education, information, health care, rural development, women and child development, people with special needs, and monitoring and surveillance have been identified in the policy as key areas for

initiating actions. Different concerned Departments/ Ministries of the Government need to take series of actions to implement the policy. The direct interventions indicated in the Indian nutrition policy as short term measures are: expanding the nutrition intervention net (ICDS, UIP, ORT), empowering mothers with nutrition and health education, reaching the adolescent girls, ensuring better coverage of expectant women, controlling micronutrient deficiencies, and fortifying essential food with nutrients. The long term measures to institutional changes cover the areas of food security, improving dietary pattern, purchasing power, public distribution system, land reforms, health and family welfare, nutrition and health education, education and literacy, nutrition surveillance, information and communication, and community participation as indirect policy instruments.

The National Nutrition Goals were envisaged under the policy to be achieved by 2000 AD included: reduction in the incidence of moderate and severe malnutrition among pre-school children by half; reduction in the chronic undernutrition and stunted growth among children; reduction in the incidence of low birth weight to less than 10 percent; elimination of vitamin A deficiency; reduction in the iron deficiency anemia among pregnant women to 25 percent; universal iodization of salt for iodine deficiency disorders to below the endemic level; due emphasis to geriatric nutrition; annual production of 250 million tones of food grains; improving household food security through poverty alleviation programs; and promoting appropriate diets and healthy lifestyles (206). But attempts to reach all these targets were very difficult within the time frame.

Several actions already taken by the Indian Government through different national policies like agriculture policy, food policy, education policy, health policy and other development programs, which are either directly or indirectly, matched with the strategies outlined in the national nutrition policy. The task of implementation of the policy lied with different concerned Departments/ Ministries of the Government. Successful implementation of the policy depends on the willingness of the Departments/Ministries concerned. The Indian Prime Minister, Mr. P. V. Narasimha Rao stated at Education for All Summit, 1993 that

"We are striving to achieve a world in which peace and harmony reign, a world free from poverty and malnutrition". This is a strong commitment from the democratic government to improve nutritional status.

The Indian nutrition policy has been formulated through multisectoral participation. It is stated that as a nodal Department, the Department of Women and Child Development is responsible to coordinate, monitor and wherever required regulate the implementation of the National Plan of Action on Nutrition (NPAN), which is a framework to translate the National Nutrition Policy into forceful, viable and realistic action programs.

It has also been stated in the implementation strategy that the National Nutrition Council, headed by the Prime Minister will be the highest body for overseeing the implementation of the Indian national nutrition policy and the plan of action. Besides, it will issue policy guidelines for improving and strengthening the various sectoral programs and the Council will also be the national forum for policy coordination, review and direction at national level (206). It seems that the role of the National Nutrition Council of India would be duplication with the role of the Department of Women and Child Development. Although a National Nutrition Council (NNC) was constituted in 1995 to oversee implementation of the NPAN, and the State-level Councils were also to be set up, their activities were almost invisible in the country. Besides, the sectoral responsibilities need to be clearly stated in the policy document. Accountability of different nutrition concerned sectors on their performance and progress to a coordination body at the apex level is necessary.

6.2.1.2 Policy Implementation Process

Major initiatives to improve nutritional status of the population during the last fifty years were to increase food production, improve food distribution, increase household food distribution through food subsidy (direct or indirect) and improving purchasing power, and efforts to tackle micronutrient deficiencies, infection and unwanted fertility which increase chronic energy deficiency through

health sector. Indian government through its public sector implemented various nutrition programs, like Applied Nutrition Program (ANC), Special Nutrition Program (SNP), Tamil Nadu Integrated Nutrition Project (TINP)-I, Tamil Nadu Integrated Nutrition Project (TINP)-II, Integrated Child Development Services Scheme (ICDS) and Mid-Day Meal Program (MDM) for the improvement of nutritional status of the people. Each program had specific objectives and target groups.

The Applied Nutrition Program was implemented to promote production of protective foods such as vegetables and fruits for ensuring consumption of the mothers and children. Nutrition education was the main focus. In tribal areas and urban slums, SNP was started food supplementation to expectant and nursing mothers and children of the lower socio-economic groups in 1970.

The TINP was an externally assisted health and nutrition intervention that offered a package of health and nutrition services to young children and pregnant and lactating women in 9000 villages of rural Tamil Nadu.

The ICDS was initiated in 1975 with an integrated package of services of health and nutrition inputs along with health and nutrition education depending on the experience of the ANP and SNP. Although evaluation of this program showed many lacking to bring success during implementation, the government now expanding the program throughout the country and efforts will be made to improve the performance under ICDS. Because of universalisation of ICDS, all the TINP blocks will be merged with ICDS and converted into ICDS blocks (206).

Massive noon meal program to school-children between 2-14 years of age was initiated first in Tamil Nadu through 63000 Noon Meal program centers for two decades. The same program has been implemented in Andhra Pradesh to cover all school children (206).

During implementation of the programs the implementers experienced many achievements as well as failures. Independent evaluations of all these programs were done and the lessons learned from these projects helped the

national nutrition policy making. The policy formulators and stakeholders were careful in formulating and implementing the national nutrition policy.

The Indian nutrition policy has been reflected in the national plan of action on nutrition and the 9th five year plan document for initiating nutritional activities in the country. As the policy prescribed a series of action points/initiatives to be undertaken by various Ministries/ Departments of the Governments, a national plan of action on nutrition (NPAN) was formulated in India in 1995 with sectoral commitments of 14 nutrition related Ministries/ Departments viz. Agriculture, Food Production, Civil Supplies and Public Distribution, Education, Forestry, information and Broadcasting, Health and Family Welfare, Labour, Rural Development, Urban Development, Welfare, Women and Child Development etc (207).

The institution of National Nutrition Policy under the auspices of the Department of Women and Child Development of the Ministry of Human Resource Development has prepared the National Plan of Action for Nutrition (NPAN), which reflected the specific objective of operationalizing the multisectoral strategy enshrined in the policy. The NPAN also reflects the vision and the abiding interest of the planners and nutrition scientists in nutritional welfare of the country (208). The National Plan of Action would serve the dual purpose of having a more or less set pattern for implementing the National Nutrition Policy as well as meeting the commitment made at the ICN.

The Food and Nutrition Board (FNB) established in 1964 in the Department of Food in the then Ministry of Agriculture, was transferred to the Department of Women and Child Development on 1st April 1993 in pursuance of the National Nutrition Policy adopted by the Government (209). The infrastructure of FNB is comprised of a technical wing at the Center, four regional offices at Delhi, Mumbai, Calcutta and Chennai and 43 Community Food and Nutrition Units located in 27 States/Union Territories.

The programs of FNB aim at creating nutritional awareness and promoting nutrition of the people through various projects in the field of nutrition and food

technology. Development of a comprehensive, sustainable communication strategy at the national, state, district and community levels has been initiated so that the behavioral change objectives can be reached in an incisive, cost effective and time bound manner (210).

6.2.1.3 Policy Progress

It was stated that in India acute large-scale famines, which used to occur periodically before independence has now been, eliminated (211, 212). Although Sukhatme described that some 50 percent people in India are estimated to be starving for want of adequate purchasing capacity and according to him this proportion of the starving poor is reported to be rising (213).

One of the major achievements in India in the last 50 years has been the green revolution and self-sufficiency in food production. Even the faster growth of food production in India has kept pace with the population growth. India achieved near self-sufficiency in the availability of food grain by the mid-seventies due to the remarkable success of the Green Revolution. And this self-sufficiency in food has to be assessed in the light of the limited purchasing power of the Indian mass (211). Therefore, the self-sufficiency in food could not help those who have no land to produce food or have no money to purchase foods. Still a large proportion of poor households does not have access to adequate food (212). This happens due to lack of their purchasing power. Food production has increased from 50.82 tons in 1950-51 to 198.8 tons in 1996-97. The per capita food grain availability had increased from 189 kg in 1970-73 to 191 kg by 1980-83 and 201 kg by 1991-93 (214).

It is a matter of great concern that while the cereal production has been growing steadily at a rate higher than the population growth rate, the production of coarse grain and pulses has not shown a similar trend. This causes a reduction in the per capita availability of pulses (from 60.7 grams to 34 grams per day) and coarse grains. Protein intake has been reduced due to inadequate per capita availability of pulses. Coarse grains are cheap and at the same time provide

substantially higher calories for the same cost. The Indian 9th Five-Year Plan has suggested taking efforts to increase production of pulses and coarse grain and distribution of coarse grain through PDS.

The Indian Council of Medical Research in 1992 has recommended the nutrient requirements for Indian children 6 to 24 months of age (215), while the National Institute of Nutrition has introduced the dietary guidelines for the infants of 6 to 12 months and the 1-3 year age group (216).

The nutrition problem in India is not so much one of lack of food grains at the overall national level, as of lack of adequate access to food. In case of over (at least) 30 percent of poor households the family income is so low that even if 70 per cent of that family income is spent on food, the nutritional needs are not met (212). Therefore, Indian nutrition problem is not just that of purchasing capacity of the poor, but a more complex problem (213).

India has a buffer stock of about 36 million tons of food grains. In case of fruits and vegetables, it is the second largest producer after Brazil. In case of milk, this country is boosting to have second position. In spite of all these achievements food security is not achieved at household level resulting in undernutrition/hunger and micronutrient malnutrition/hidden hunger. National Health Policy formulated in 1983 outlines the need for adequate nutritious and safe food (217). About 35 percent or around 325 million Indians are classified as poor in India. Over 70 percent of the family income of this category is spent to meet food and nutritional needs alone. The food and nutrition deficiencies are much larger than what one would conceive by looking in to the poverty estimates. In fact deficiencies in energy, proteins and other micronutrients continue even up to the seventh decile. These desegregated estimates are useful in comprehending the structure of the problems associated with food and nutrition security in India (218). The Government of India implements major poverty alleviation programs to deal with persistent and massive poverty, hunger and malnutrition. This paradox is India's "silent emergency', which is being tackled in a development manner. World Food Program (WFP) provides $25 million worth of food aid a year to India,

concentrated in the poorest areas of the country as a part of a five-year Country Program. The WFP provides 10 percent of the supplementary nutrition component of ICDS, which reaches 1.9 million beneficiaries in the states of Assam, Madhya Pradesh, Rajasthan, Uttar Pradesh and Kerala. WFP food assistance comes in the form of a micronutrient fortified blended food commodity, either imported corn soya blend or a locally produced commodity Indiamix (219).

The Indian national nutrition policy has achieved some progress since its adoption by the Government. The progress of the policy implementation depends on the successful implementation of the Indian NPAN. In the mean time the TINP has been merged with the ICDS program to make uniformity over the country. The concerned ministries through the development programs are implementing most of the policy activities. Different Ministries have made sectoral progress through action programs, Ministry of Agriculture intensified a gender specific nutritional initiative under "Women in Agriculture Programs", and a Nutrition Cell is established to take care of the commitments of NPAN; Ministry of Civil Supplies is committed to ensure household food security in the most backward and remote areas through fair price shops to reach about 16 crore families distributing foods worth more than Rs. 15000 crores by the end of 1996-97 (206).

The education sector provides nation-wide Nutrition Support to Primary Education (Mid-Day Meal Scheme); Ministry of Forest and Environment has a program at the community level to grow nutrition-rich plants/fruits; Ministry of Health and Family Welfare is implementing programs on prevention, detection and management of chronic energy deficiency and other nutritional disorders and immunization; Ministry of Food ensures protection of quality and nutritive value of food grains; and Food Processing Industries is manufacturing ready-to-eat nutritious foods and cooked food translation the nutrition policy directives (206).

The Ministry of Rural Areas and Employment is trying to improve purchasing power of the rural poor through poverty alleviation, self-employment and income generation programs; The Department of Women and Child Development is the nodal agency responsible for implementation of the national

nutrition policy and is committed to improve the nutritional status of the population (206).

India has considered the problem of malnutrition more seriously than many other countries and has developed appropriate policies and mounted major programs to address it. Among them the Public Distribution System (PDS), the Integrated Child Development Services (ICDS) program, the National Mid-day Meal Program and several employment schemes providing food for work are important. These policies and programs have had relatively limited impact on nutrition among the poor because of major problems in effective targeting, implementation and coverage. The PDS, for example, fails to reach the majority of the poor despite absorbing 0.5 percent of GDP. The problem has been recognized and the PDS has been reformulated as Targeted PDS (TPDS). Similarly the ICDS program covers less than one-half of the target population with poor quality services after more than 20 years of operation (220). National nutrition goals set for the year 2000 may not be achieved even by 2010. India spends much less than necessary to deal with its malnutrition problems. Spending on the ICDS, the NNMP, and the micronutrient programs, now amounts to 0.19 percent of GNP, whereas Sri Lanka has successfully spent about 1 percent of GNP on direct nutritional programs in the 1980s, while simultaneously improving health services, education for females, and antipoverty measures. The Indian states spending varies and most of the states do not allocate resources according to the requirements with the levels of poverty or malnutrition (220). The Indian Government's planning for the coverage of nutrition activities did not become successful. In the fifth plan (1974-79) India introduced ICDS program, which combined nutrition and health education, supplementary feeding, maternal and child health services, and pre-school education. These efforts constitute India's longest running nutritional program and the world's largest. It expanded from 100 blocks at the end of fifth plan to 1000 blocks in the sixth plan (1980-85), to about 2000 in the seventh plan (1985-90), and to more than 4000 or 70 percent of the 5738 development blocks in the country during eighth plan period (1992-97). But due to shortage of resources,

India could not cover all rural and urban areas in eighth plan period and possibly leaving this goal to be achieved by ninth plan (1997-2002) (220).

The first essential requirement is a higher level of sustained commitment, if India is to succeed in dealing with malnutrition. Because of having so many progresses in food production, disease control and economic and social development, India itself accounts for 40 percent of the world's malnourished children while containing less than 20 percent of the global child population.

6.2.2 NATIONAL FOOD AND NUTRITION POLICY OF PHILIPPINES

The Philippines is composed of 7107 islands, many of which are still uninhabited. Eleven largest islands cover 92 percent of its land. There are three major island groups, Luzon, Mindanao and Visayas. Metro Manila, in Luzon, is the seat of government, and the heart of the country's business, economic, social and cultural activities.

Malnutrition is a serious problem in the Filipino population. The major nutritional problems of the country remains to be chronic nutrient inadequacy manifested by protein-energy malnutrition, and deficiencies in vitamin A, Iron, and iodine. Infants, preschoolers aged 1-3 years old, school children, and pregnant and lactating women are the most seriously affected (221).

6.2.2.1 Policy Formulation Process

The nutrition activities in the country started initially on research in most cases. The National Research Council was assigned to conduct research studies, under a section of which it formulated the first table of Recommended Dietary Allowance (RDA) in 1932. In 1947, on the initiative and efforts of the Philippine Association of Nutrition, the Philippine Institute of Nutrition was organized. This Institute revised the country's food consumption table and did surveys on nutritional biochemistry and nutrition. The government promulgated a legislative act on food fortification particularly the use of enriched rice to combat beriberi as recommended by the researchers after a series of experiments. The increasing

concern of solving malnutrition of the country paved the way for adoption of a more comprehensive organizational structure and a program on nutrition. It was considered as a multisectoral responsibility and strong coordination among the sectors became the key strategy. The National Coordinating Council on Food and Nutrition was acting as the coordinating body on nutrition, which was merged with the National Food and Agriculture Council on May 6, 1969 through an executive order 183. The first 5-year (1971-75) Philippine Food and Nutrition Program (PFNP) was formulated and implemented by the coordinated efforts of different sectors at local levels. The National Nutrition council was created on June 25, 1974 under the office of the President by virtue of a Presidential Decree No. 491, known as Nutrition Act of 1974, which declared nutrition as a priority of the government (222). The Council was given the task of integrating and coordinating the nutrition policies and programs of all agencies involved in nutrition under the Philippine Food and Nutrition program (PFNP). Since then, the NNC has acted as the government's coordinating body on nutrition (223). The chronological events that happened in nutrition activities in the Philippines are shown in Table- 6.5.

The 1987 Philippine Constitution states that "The state shall promote a just and dynamic social order that will ensure the prosperity and independence of the nation and free the people from poverty through policies that provide adequate social services, promote full employment, raising standard of living and an improved quality of life for all" (Section 9 Article. 11). Moreover, it provides that "The state shall defend the right of the children to assistance, including proper care and nutrition" (Section 3 Article. XV) (224).

The country's nutrition policy was formulated with an ultimate goal of improving the nutritional status of the Filipino population in the line with the state provisions. The policy recognizes that nutrition is a basic human need, and is a critical factor in an individual's growth and capacity to function in a society. Since good nutrition and health produce an economically productive and socially active citizenry, the policy emphasized for achieving it.

Table-6.5: Chronological Events on Nutritional Activities in Philippines (1930-99)

Period	Nutrition Situation	Nutrition Services
1930-50s	Food consumption situation unknown.	First Table on Recommended Dietary Allowances was prepared; Philippine Institute of Nutrition established; Conducted survey on nutritional biochemistry and nutrition.
1960s	Malnutrition (micro-nutrient) most preva-lent in lower economic strata; & Emphasized strong coordination for nutrition activities.	Enactment of Food Fortification Act to improve nutritional value and combat beriberi; National Coordination Council on Food and Nutrition merged with National food and Agriculture Council in May 1969.
1970s	Recognition of nutrition as a multi-sectoral approach;	Philippine Food and Nutrition Program (PFNP) (1971-75) formulated and implemented by multisectoral approach at local level, National Nutrition Council established by Nutrition Act of June 1974
1980-87	Constitutional Recognition of nutrition as a basic human need for growth and capacity to function in a society.	Program to make the people free from poverty, raising the standard of living and improved quality of life; Right of children including proper care and nutrition; Measures for immediate/ direct intervention to the malnourished in the community; Regular nutrition surveys introduced; and formulated the Food and Nutrition Policy, 1987.
1988-99	Medium Term Philip-pine Development Plan (1988-92) recognized poverty as impediment t nutritional develop-ment Weaknesses and gaps identified and ensured Human development thrust.	Initiated PFNP as family focused and targeted to poverty alleviation and improvement of quality of life; Pilot testing of food and nutrition surveillance system; and Finalization of the Philippine Plan of Action on Nutrition (PPAN) developed by Food and Nutrition Research Institute.

To achieve this nutritional goal, the problem of malnutrition is reviewed as a multisectoral concern in Philippine. Immediate or direct intervention is required to alleviate the condition of the malnourished and the long-term approaches to solve the problem at its root causes. The Medium Term Philippine Development Plan 1988-92 included PFNP as a family focused program and a broad multilevel program concerned with poverty alleviation and improvement of quality of life

(225). Nutrition indicators are used for the formulation of policy thrusts and strategies, as shown in the updating of the development plan of Philippines (226).

The Philippines nutrition policy thrusts (221), which are consistent with the human development thrusts of the Medium-Term Philippine Development Plan are as follows:

- Focus public resources toward the implementation of community-based nutrition interventions and poverty-alleviation measures in identified nutritionally depressed areas targeting nutritionally at-risk families and individuals;
- Promote a policy environment across development sectors that will ensure national improvement;
- Integrate nutrition considerations in multilevel and sectoral development plans and programs that pursue:
    * reduction of poverty and address its causes,
    * increased food availability,
    * better health, and
    * increased productivity and economic growth;
- Strengthen Local Government Unit and community capability for planning, implementing, monitoring and evaluating nutrition programs;
- Improve and strengthen existing mechanisms for nutrition planning, policy formulation, implementation, monitoring, evaluation, surveillance, and advocacy at all levels;
- Conduct basic, applied, and operations research on nutrition; strengthen research utilization and technology transfer; and regularly assess plan implementation;
- Increase emphasis on the vital role of information and development communication in promoting good nutrition; and
- Involve NGOs and the business sector more systematically in plan implementation.

The policy was reflected in the adoption of overall objectives and strategies to improve the nutrition situation. The objective of the PFNP is to improve the levels of food consumption, reduce the prevalence of malnutrition and improve the quality of life of the population, in order to contribute effectively to national development. Five major strategies have been undertaken to achieve these objectives. These are nutrition intervention strategy targeting to nutritionally depressed areas and population groups on prevention and control of energy-protein malnutrition and vitamin A; nutrition communication strategy to increase awareness and commitment of policy makers, implementers and general population towards adequate nutrition; nutrition in development strategy particularly development of a comprehensive food and nutrition policy based on the analysis of the nutritional implications of sectoral policies and programs; nutrition surveillance strategy to assess the state of nutrition regularly and monitoring and evaluation of programs; and support strategies particularly on technical assistance and man-power development, nutrition research and standards, resource generation and mobilization were very important.

6.2.2.2 Policy Implementation Process

The policy is being implemented through nutrition programs of different sectors concerned with food and nutrition in the Philippines. The National Nutrition Council (NNC) of Philippines acts as the central policy making and coordinating body on nutrition as mandated by the Presidential Decree No. 491. The responsibility of the Council included the formulation of national food and nutrition policies and strategies for nutritional improvement; coordination during planning, implementation, monitoring and evaluation of the integrated national food and nutrition programs; and coordination of release of funds for nutrition programs and projects as well as requests for grants and loans by governmental and non-governmental agencies involved in the food and nutrition program (222).

There is a Governing Board at the top consisting of ten members of the Philippines cabinet and three representatives from the private sectors. The NNC is

attached with the Department of Agriculture and chaired by the Secretary of Agriculture, which stressed that nutritional needs of the population relate primarily to food production and agricultural development. The functions of the governing Board are to advise the President, the cabinet, and the congress on national nutrition situation and the policy responses to address the situation; formulate policies and approve policy recommendations submitted by the Technical Committee; and to approve nutrition programs, plans, and projects and issue implementation measures to respective field personnel. The role health sector is also recognized, as the Secretary of Health sits as Vice Chairman of the NNC and reviving the assignment of the Department of Health as lead agency for nutrition related health services signifies continued recognition of the agencies distinct role in this area (226).

The Cabinet Secretaries of different sectors, concerned with food and nutrition, have signed statements of commitment under Philippine Food and Nutrition Program. The commitments of the Departments of Agriculture; Health; Social Welfare and Development; Education, Culture and Sports; Local Governments; Science and Technology / food and Nutrition Research Institute; and the National Economic and Development Authority in their respective fields have been clearly made towards improvement of nutritional status of the Filipinos. The sectoral performances are reported to the central Governing Board.

The NNC is supported by a secretariat headed by the Executive Director. The secretariat provides technical support and advice to the governing board on the formulation of food and nutrition policies and in coordinating the implementation of Philippine Food and Nutrition Program. The secretariat receives funds from UNICEF, FAO, and USAID for its research projects and manpower development.

The secretariat has a number of responsibilities including technical, financial and logistical support providing to the local governments and agencies for the development and implementation of nutrition programs and projects. The Technical Committee works as a technical advisory group to the council and facilitates the coordination of inter- and intra-agency activities. The nutrition

committees organized at the regional, provincial, city, municipal and barangay levels are operationalizing the sub-national activities on nutrition under PFNP. Government and non-governmental organizations involved in nutrition program are represented in these committees. The local chief executive (governors and mayors) as chairman, initiates the organization and establishment of a functional nutrition committee at his/her level and also appoints nutritionist to assist the chairman. Under the chairman's leadership local level planning, implementation, monitoring and evaluation of nutrition programs are conducted. At the village level, the Barangay Nutrition Scholar, a volunteer worker directly works with the program target group.

At the local level, the LAKASS (means 'A body with sufficient nutrition will grow strong') is the action oriented component PFNP being implemented. The highly distressed barangays within the municipality are provided with seed money of peso 200,000 (approx. US$ 8500) to supplement and complement existing resources at the local level. The seed money could be used for supplementary feeding, home food production, vitamin A, iron and iodine supplementation, sanitary latrines and safe drinking water, and income generating projects. Local mayors are responsible for the overall implementation of the LAKASS program (222). The NNC-GB sets policies and guidelines for the implementation of LAKASS program and the NNC secretariat provides technical support to the NNC-GB (227).

The implementation of the Philippine Plan of Action for Nutrition (PPAN) shall be guided by different policy thrusts, which are consistent with the human development thrusts of the Medium-Term Philippine Development Plan.

6.2.2.3 Policy Progress

The main progress of the government's policy is the recognition of nutrition as reflected in the Nutrition Act of 1974 that paved the way of creation of the NNC. The Philippines experienced tremendous economic and political crises in the 1980s and consequently, significant deterioration in the nutritional status of its

population. Against the barrier, the PFNP is continuously setting the legislative and development policy agenda towards nutritional improvement.

The intensive liaison and hard work of the NNC with the country's legislative bodies resulted in active involvement of legislators in the formulation of measures that directly address malnutrition and its causes. In 1989, NNC did the pilot testing of the food and nutrition surveillance system in Iloilo (Western Visayas) for the institutionalization of a nutrition surveillance system. The PFNP has generated vital nutrition indicators for nutrition policy and program development. Inadequate health service and low food production in the country was attributed to the limited resources of the implementing agencies and relatively ineffective targeting of the nutritionally-at-risk groups.

The PFNP has made successes on increasing nutrition knowledge of the population and pin-pointing the solution; advocacy among the legislators and policy makers; visible structure for converging the sectoral nutrition activities in a coordinated manner; and focused delivery of nutrition services on identifying most nutritionally-at-risk groups of population.

Over the years, the general pattern of the Filipino diet has remained to be predominantly rice complemented with fish and vegetables. Important changes in the consumption of these foods and corresponding nutrients intake of Filipinos have been noticed. The total food consumption of the population decreased from 869 gm in 1987 to 803 gm per capita per day in 1993. Energy, iron, calcium and ascorbic acid were the nutrients that indicated significant decreases in 1993 from 1987 intake levels ranging from 3.9% (energy) to 12.9% (ascorbic acid) (228).

The national nutrition surveys conducted by the Food and Nutrition Institutes of the Department of Science and Technology showed that the prevalence of underweight preschoolers declined from 21.9 percent in 1978 to 17.2 percent in 1982. Although serious efforts were taken to improve the nutritional status during 1983-85, the prevalence rate was 17.7 percent in 1987 due to extremely difficult economic problems. The nutrition situation improved with a prevalence rate of 14 percent in 1990 due to economic improvement (221).

Major weakness and gaps were also identified in policy and program implementation. Because of the absence of specific guidelines defining roles and responsibilities of the local nutrition committees, weak leadership and lack of commitment, some local nutrition committees could not function resulting increased malnutrition. The NNC has been transferred and attached to several agencies involved in nutrition from its inception in 1974. From 1975 to 1988, NNC has been transferred from the office of the President to the Ministry of Health, then to the Ministry of Agriculture, the Department of Social Welfare and Development and again back to the Department of Agriculture in 1988. Although the existence of NNC and PFNP are continued for longer period, nutrition has not really established itself in the total policy scheme of the government. Nutrition policies which have been formulated by the NNC member agencies themselves have not been pursued vigorously primarily due to lack of understanding and appreciation by some field implementers of how nutrition fits into their sectoral scheme. Besides, there are lack of strong political influence and resources to ensure implementation of nutrition policies, strategies and programs. The half-hearted commitments could not make any progress. The most important element in the success of a multisectoral nutrition program is the strong commitment of the national leadership and implementers at all levels to the cause of nutrition.

The Philippine Plan of Action for Nutrition has already been developed by the Food and Nutrition Research Institute that reflects the future programs and projects of the Philippines to improve the nutritional status of the Filipinos (229). The NNC Governing Board is continuously providing overall policy and program directions at the national level. Not only that the Board is trying to accumulate resources from different areas to implement the nutrition policy through the PPAN.

Nevertheless, there is much hope that current policies and programs that will spearhead alleviation of poverty among the Filipino people, along with strong nutrition advocacy, can bring about real dietary and nutritional improvements in the country.

6.2.3 NATIONAL FOOD AND NUTRITION POLICY OF THAILAND

Thailand is primarily an agrarian society with about three-fourths of her people residing in rural areas. The country has five regions. The regions are recognizable by their characteristic landforms: the Northern ranges and valleys, the Central fertile plain, the Eastern coastal seaboard, the arid Northeast plateau and the moist peninsular South. The Thai race is generally considered to be one of the oldest in Asia. Thailand's government administrative body consists of thirteen Ministries and the Office of the Prime Minister. Overall government policies are channeled through the Ministry of Interior, while other line Ministries are responsible for implementing sectoral policies and plans. The country itself is divided into Bangkok Metropolis as the capital as well as 72 provinces, which are further divided into 704 districts, 7871 sub-districts (tambon) and 62373 villages (230). Thailand's health and nutrition development has spanned several decades with nutrition policies, plans and programs.

6.2.3.1 Policy Formulation Process

The year 1926 is a landmark in the history of nutrition as a scientific and public-health interest in Thailand because of the formation of a Nutrition Section in the Ministry of Public Health (MOPH) during the tenure of Dr. Young Chutima. This Division took a leading role in nutrition activities throughout the following three to four decades and might have contributed to nutrition's position within the medical domain (231). The national policy on food and nutrition got its impetus during mid-1970s in Thailand. There is no recorded information on nutritional activities till 1950 in Thailand. The nutrition programs and activities until this period are available mainly through personal interviews. In Thailand several nutrition activities had been undertaken, mostly as individual interests and capacities (231).

A relationship between family income and food consumption was documented in a rural economic survey carried out in 1934-35, which assessed the impact of 1932 economic depression on food expenditure, particularly in the

Northeast and the North. Despite changes in food patterns at this time the survey report noted little evidence of deficiencies in Thai diets (232). Fifteen to twenty year later, dietary surveys were conducted in Thailand's Northeast region and in the Bangrak district of Bangkok (233). A team of physicians carried out medical and anthropometric examination of children documented malnutrition in Bangkok in 1958. Rural children were reported under-weight and under-height while compared with the average weight and height of Bangkok children (232). The history of nutrition in Thailand actually began seriously in the mid-1970s. The chronological events in the field of nutrition held in Thailand have been shown in Table 6.6. Until 1950s, some activities on nutrition, particularly professional development and establishment of institutes concerned with nutrition was done in the country. The formation of Nutrition Section in the Ministry of Public Health (MOPH), nutrition education campaign, and Food Consumption Survey were also conducted during this period. Nutrition was included in different colleges, especially as part of home economics training (234).

The history of nutrition in Thailand during 1926-1976 has been summarized as follows, considering leading factors to the next stages of nutrition in the country:

A good number of specialized and competent Thai scholars who can take leadership and had concerns and commitment to the country.

Lot of information on the magnitude and severity of the national nutrition problems through several nutrition surveys was available. Malnutrition was an outcome of several factors closely linked to development. It cannot be controlled with a single intervention, which requires multisectoral participation. A good number of options were available to the implementers, which were found through operation research on direct nutrition interventions, along with primary health care and rural developments. Financial, technical and advanced knowledge supports were available from international agencies to the Thai nutrition activities were very helpful during this period.

Table-6.6: Chronological Events on Nutritional Activities in Thailand (1926-99)

Period	Nutrition Situation	Nutrition Services
1926-1950	Malnutrition widely prevalent in the country, Grown public health interest	Professional development, establishment of institutes and formation of Nutrition Section in the Ministry of Public Health (MOPH); Nutrition education campaign and Food Consumption Survey conducted.
1950s	Documentation of malnutrition and nutritional disorders, Poor nutrition knowledge of people	Inclusion of nutrition theme in the curricula; Medical influence on nutrition activities; Topics on infant feeding, child nutrition, and clinical nutrition included in the medical and nursing curriculum.
1960s	Low dietary intake of calories among rural people; PEM highly prevalent among infant, pregnant and lactating mothers; Prevalence of anemia and micronutrient deficiencies including IDD.	First nationwide nutrition survey; Household expenditure survey; Nutrition teaching and research activities; Nutrition education with demonstration in schools and Launching of Applied Nutrition Program; School lunch program; Production and distribution of iodized of salt; and Formation of national nutrition committee and 5 sub-committees within health sector
1970s	Recognition of nutrition in national development and energy deficiency, anemia, vitamin A deficiency as major nutritional problems of public health importance	First national food and nutrition plan (1977-81) prepared aiming at implementation of multisectoral national nutrition planning; Approval of protein food promotion policy; Applied Nutrition Program (ANP); Publicity of malnutrition, diseases and poverty to the people was done by nutritionists, nutrition association and voluntary groups; Prophylaxis against Anemia and Vitamin A deficiency.
1980s	Nutrition was recognized as cause of poverty	Efforts to improve nutrition by rural development policy to eradicate poverty and the primary health care plan (Second NFNP, 1982-86). Introduction of the basic minimum needs (BMN) concept. Nationwide campaign for quality of life in the third NFNP (1987-91).
1990s	Progressive efforts to alleviate malnutrition and Recognition of nutrition as a crucial element in long term rural development for improved quality of life.	Continuation of campaign for quality of life, Nationwide adoption of BMN approach; Integration of policy into socioeconomic, health and nutritional development plans and programs.

Nutrition was considered as a public health problem in the First National Economic Development Plan (1962-66) of Thailand; it noted that:

"Though Thailand is a country with surplus food and no one dies of starvation, measures are necessary to cope with malnutrition among the rural population which occurs in quite a number of cases as a result of ignorance and lack of balanced diet. Bad food preparation also leads in some districts to liver fluke and other parasitic diseases."

Attempts to establish a national nutrition committee began in 1960s (235). This committee has five sub-committees: nutrition education and training, nutrition promotion, food laboratory and research, nutrition for mother and child, and school feeding. Functions of these committees, their contribution to nutritional developments, etc. have not been found recorded. But most of the activities were limited within health sector as speculated. The prevalence of nutritional deficiencies in Thailand were documented in 1970s (236, 237, 238). It reflects the concern of many Thai scientists, who agreed that in spite of growing national prosperity, many people's basic human needs were unmet. The government planners, policy makers and politicians were also made aware of the situation. The nutrition scientists, Nutrition Association of Thailand and other voluntary groups publicized the vicious cycle of malnutrition, disease and poverty.

The impetus of developing a national nutrition policy gained much needed support since early 1970s. Informal meetings were held in 1972 among concerned professionals, such as, Dr. Amon Nondasuta, the then Director General of the Ministry of Public Health; Professor Aree Valyasevi, Dean of Ramathibodi Medical School; and Dr. Saroj Buasri, from the office of National Primary Education Commission of the Ministry of Education led to a systematic approach to develop the national food and nutrition policy. They came to a consensus that the policy makers should understand that: (i) improving the people's nutritional status is an investment, not an expense, and is fundamental to future development; (ii) malnutrition is not a health problem, but an outcome of social disparity; and

(iii) the problem must be addressed beyond health sector (231). Therefore, it was crucial to gain support of the policy makers by disseminating these messages.

In Thailand, the ANP strategy was an antecedent to the joint participation of various Ministers in the development of the national food and nutrition policy. Six ministerial working groups, such as, economic sector, agricultural sector, public health sector, education sector, social development sector, and research and training sector prepared sectoral documents concerned with nutrition. These documents were presented and important deliberations on these documents and recommendations made the basis for the development of national food and nutrition policy guidelines for Thailand. Active involvement of several ministries in efforts to alleviate national nutrition problems must be encouraged (234). One important thing is that Thailand has not formulated an independent national food and nutrition policy document but the concrete objectives of nutritional improvements have been included in the NFNP and other policies like primary health care and poverty eradication.

6.2.3.2 Policy Implementation Process

Thailand's pilot Expanded Nutrition Project, initiated in March 1961, can be considered as the first attempt to implement the nutrition improvement program. But the national food and nutrition policy of Thailand has been implemented by the concerned sectors reflecting in national food and nutrition plan and programs. Implementation of the multisectoral national nutrition planning began during the Fourth NESDP (1977-1981), that included the First National Food and Nutrition Plan (NFNP) and multisectoral approaches to address malnutrition. The Division of Nutrition of the Ministry of Public Health (MOPH) conducted a national survey in 1975 using anthropometric indices of weight for age (Thai standard, Gomes classification). It was revealed that 53 percent of children surveyed in the central province of Suphan Buri were malnourished to some degree, as were 61.5 percent of the those in the southern province of Nakhon Si Thammarat, 65 percent of those in Chiang Mai in the northern region, and 73 percent of those from the northern province of Nakhon Ratchasima (239). This

survey also identified possible causes of the situation and accordingly the government planned to implement nutrition programs through four ministries. These include- Public Health, Education, Interior, and Agriculture and Cooperatives, who shared responsibilities for implementing programs. Each ministry developed action plans coinciding with its functional responsibilities. High-ranking representatives from each ministry made up the National Food and Nutrition Committee. A secretariat was also appointed to coordinate all activities. Provincial Food and Nutrition Committees were formed in each participating province with a composition similar to that of the national committee. These committees, usually chaired by provincial governors, handled planning and decision-making related to provincial food and nutrition activities. Several nutrition programs have been implemented and researches have been conducted on nutrition situation in Thailand. Despite broad efforts, the first NFNP produced unsatisfactory results. Prevalence of malnutrition among the under fives remained high (239). The research results were considered and policy decisions taken during program implementation. Between 1976 and 1979, the Institute of Nutrition conducted a two-part study in Northeastern rural villages (240, 241). The MOPH followed-up on this research in 90 villages of three provinces of Thailand within a project called Innovative Village Nutrition Project (242). During 1982-1986, the Second NFNP tried to implement the poverty alleviation policy of the government, within the Fifth NESDP, where nutrition planning took a distinctly different approach than that of the previous plan. The first plan targeted infants and preschool children, pregnant and lactating women, but the second plan increased attention paid to school-aged children. The goals set for this NFNP were more specific than those defined in the previous NFNP. Two important nutrition policies such as the rural development policy to eradicate poverty (Poverty Alleviation Plan, PAP) and the Primary Health Care Plan during this period thus contributed greatly toward improving nutrition in the country. Both these plans achieved mixed success and thus a new concept of improving various aspects of wellbeing of all individuals were introduced in the name of Basic Minimum Needs (BMN)

approach (243). The Third NFNP of Thailand (1987-91) incorporated into the sixth NESDP continued the Primary Health Care Plan with multisectoral collaboration for planning and implementation. The target groups for the Third NFNP were the same as for the previous two, except the wage laborers and the elderly were added. It also emphasized the coverage and the quality of nutrition programs.

Several cooperating ministries with the financial assistance of UNICEF, WHO and FAO implemented ANP in ten villages in the Northeast province of Ubon in continuation of the previous pilot project. The project focused on controlling nutritional deficiency diseases, nutrition education, and production and promotion of protective food (231). The popular nutrition slogans were also created awareness, which include as: "Human milk for human baby." "Happiness with good nutrition." "One egg each day helps keep a physically healthy body." (242).

Seven major strategies were undertaken to solve malnutrition and improve the nutritional status of Thai population. First nutrition surveillance included growth monitoring by using weight charts, prevalence of goiter, clinical signs of anemia and angular stomatitis, referral system was there for the needy child to the nearest health center. Nutrition information, education and communication emphasized increasing food and nutrition knowledge during pregnancy and lactation periods, promotion of breastfeeding, introduction proper supplementary foods, increased awareness of the five food groups, food hygiene and correction of false food beliefs and taboos. Production of nutritious foods also promoted in the communities. Supplementary food production and supplementary feeding programs at village levels were strengthened. School lunch program covering 5000 schools in the poverty rich areas were established. Food fortification and distribution were emphasized in terms of salt iodization. Finally training was provided to all health personnel at community level as well as to the community leaders (244).

The conceptual framework set out by the Ministry of Public Health has identified the underlying causes of malnutrition as poverty, improper dietary

practices, illness and inadequate childcare. The ministry also found out the alleviation process of income generating activities, nutrition education, better health services (curative, preventive and promotive), and child care centers respectively (245). In Thailand, the vitamin A deficiency problem has been attacked using a coordinated approach. In the short term, high dose vitamin A capsules were given to all children living in high-risk areas and in the medium term, legislation was also enacted and enforced to fortify commonly consumed foods such as sweetened condensed milk. And in the long term, measures were undertaken entailing the promotion of breastfeeding and encouraging the increased production and consumption of vitamin A-rich foods (246). Other supporting activities, such as improving immunization coverage, public health measures to control infection, and income generation projects, have also been important to the program's success. The most important thing in policy implementation has been the maximum involvement and participation by the people to solve their own problems in Thailand. The BMN indicators have been used for problem identification and goal setting for development. Improvements in planning process at all levels and the integration of development activities have been strengthened in Thailand. Data and information management on rural development and nutritional aspects were strengthened at the provincial, departmental and national levels for planning, coordination and evaluation.

6.2.3.3 Policy Progress

The Thai economy has grown steadily since the end of the Second World War. Because of the conservative and prudent macro-economic policies, Thailand has performed reasonably well during the vicissitudes of the world economy in the past few decades. Most of the people have better access to preventive and curative health care services. This was possible due to Thailand's adherence to the PHC and BMN approaches. The country is self-reliant in terms of food and a major food exporter in the world market (247). Better household food security and intra-familial food distribution patterns in the rural poverty-stricken areas (as arisen out of the poverty alleviation plan, increased nutrition awareness and education along

with such activities as growth monitoring) have continued to a great impact on reducing PEM in the under fives than direct food supplementation activities. Thailand made some impressive progress in the improvement of nutrition through effective implementation of the food and nutrition policy. Thai government was very committed to the national development. Nationally, the National Economic Policy Steering Committee, the National Economic and Social Development Board, and the Rural Employment Creation Committee continued to function, while all other national committees were dissolved and replaced by the National Rural Development Committee. Nutrition activities were integrated within the PHC approach. Up to 1986, a total of 500,000 village health communicators and 50000 village health volunteers were trained covering almost every rural village in the country (244). During the first three NEDPs/NESDPs, the health sector provided curative treatment, and only secondarily prevention, in dealing with persistent nutritional problems. The first attempt to coordinate the efforts among the four main ministries of Agriculture, Interior, Education and Public Health was not so successful during 1977-1981. Strong awareness and political commitment towards solving existing problems were possible because of availability of nutritional surveillance and mortality data of preschool children to the public. To gain government commitment often requires concrete information as a basis for deciding upon priority problems, identifying target groups and selecting possible actions.

Village nutrition fund process has been initiated in Thailand, particularly by selling the supplementary food produced to nearby communities where food processing did not exist. The government contribute 3000 baht (25 baht = 1 US$) per village to buy supplementary food, which was given to village committee for free distribution among the second- and third-degree malnourished children. The organization is similar to 'medical cooperatives'. People are required to contribute in cash, raw food, materials or labor, in addition to the government endowment. The nutrition fund promotes nutrition activities in the community (248). The second and third degree malnourished children receive food coupons from local

MOPH officers for three months, if and when they come for monthly weighings (5 baht/child/day compared with a minimum rural wage of 50 baht/day). The MOPH spends about 9,000,000 baht/year (US$ 2.2 million) in coupons. The food coupon is a new strategy introduced during the Sixth NESDP (1987-1991) and continues in the Seventh NESDP (1992-1997) (245).

A regional project promoted the ivy gourd plant (*Coccinia indica*) as a representative of vegetables high in vitamin A. Program Managers felt that intense promotion of one product was the most cost-effective way to attract consumers interest and positively affect vitamin A status. A 3-year project in the north-east region of Thailand to promote the production and consumption of vitamin A-rich foods was estimated to have a per capita cost of US$ 0.42 (249).

The impact of the programs carried out during the second NFNP was impressive. The number of children suffering from malnutrition decreased dramatically. By the end of the second NFNP, only 3-5 percent of children under five suffered from moderate or severe malnutrition, and only 18-20 percent suffered from mild malnutrition. Supplementary food production and distribution to severely and moderately malnourished children were regular in 1668 villages by 1983. Nutrition funds were established in 975 villages. Despite so many steps to achieve nutritional goals, multisectoral cooperation although improved, remained unsatisfactory.

The political commitment in the form of firm national policies is vitally important, and these must be supported through definitive plans and programs. Advocacy of professionals or international agencies as well as communities needing programs can mold the policy makers towards nutritional improvements. Policies are useless if they are not backed by an effective organizational structure and efficient managerial mechanism for coordinating and integrating the multisectoral efforts of various administrative levels, starting from central to grass root levels.

Chapter 7

COMPARISON OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH WITH THE POLICIES OF SELECTED DEVELOPED AND DEVELOPING COUNTRIES

CHAPTER 7

COMPARISON OF THE NATIONAL FOOD AND NUTRITION POLICY OF BANGLADESH WITH THE POLICIES OF SELECTED DEVELOPED AND DEVELOPING COUNTRIES

7.0 COMPARISON OF THE DIFFERENT NATIONAL FOOD AND NUTRITION POLICIES

The national food and nutrition policy of Bangladesh is compared with the national food and nutrition policies of selected developed and developing countries. Initially the formulation and implementation process and progresses of these policies have been compared. Again different other indicators concerned with nutritional developments of these countries have compared with the Bangladesh indicators. The comparison is done because of finding out the similarities and dissimilarities as well as gaps, if any, among these policies and to sharpen the analytical vision of the researcher. To avoid any controversies about the data and information of individual countries, the internationally published data has been chosen and used during comparison. These are discussed in the following sections:

7.1 COMPARISON OF THE FORMULATION PROCESS OF THE BANGLADESH POLICY WITH THE SELECTED DEVELOPED AND DEVELOPING COUNTRIES' POLICIES

The policy formulation process of Bangladesh was compared with the formulation process of the policies of developed (USA, Australia and Norway) and developing countries. Table 7.1 and 7.2 summarizes the differences of major policy objectives, key policy issues, policy approach, conflicts and compromises in policy formulation, lead sector, policy keeper and policy adoption period between Bangladesh and selected developed and developing countries respectively.

The major food and nutrition policy objectives of Bangladesh have been identified as to improve the nutritional status and healthy lifestyle. While as major policy objectives, the promotion of public health and achievement of social justice

are identified by USA; food security and enhancement of nutritional well being of the population by Australia and healthy life through nutritional improvement by Norway (Table 7.1).

Table-7.1: Food and Nutrition Policy Formulation Process in Bangladesh and the Selected Developed Countries

Formulation Process	Bangladesh	USA	Australia	Norway
Major Policy Objectives	Improve Nutritional Status and Healthy Lifestyle	Nutrition Security and Enhancing Nutritional Well-being	Promotion of Public Health and achievement of Social Justice	Healthy Life through Nutritional Improvement
Key Policy Issues	Household Food Security; Undernutrition, Micronutrient Malnutrition; Poverty Alleviation; IEC and FBDG	Food-based Dietary Guide-lines; Health Promotion and Disease Control; Control of Over-nutrition.	Availability and Affordability of Nutritious Foods; Dietary Goals and Guidelines and Specific Intervention	Better Health; Nutritious Diet; Agricultural Self-sufficiency Rural Development and Healthy Environment
Policy Approach	Multisectoral	Multisectoral	Multisectoral	Multisectoral
Conflicts and Com-promises	Conflicts between Nutrition Experts and Bureaucracy	Conflicts between USDA and Meat and Dairy Producers	Conflicts between Policymaker and Red Meat Producers and Food Processors	Leadership Conflicts between Health and Agriculture Sector
Lead Sector/ Ministry	Ministry of Health and Family Welfare	USDA and Deptt. of Health and Social Services	Federal Department of Health	Ministry of Agriculture
Policy-Keeper	Bangladesh National Nutrition Council	National Nutrition Monitoring Council / USDA	Nutrition Advisory Council	National Nutrition Council
Adoption Period	Sept 1997	Farm Bill 1995	May 1992	1975 (Revised in 1981)

On the other hand, major policy objectives of India are removal of malnutrition from the disadvantaged groups; Philippines are improvement of nutritional status and standard of living and quality of life of the people and of

Thailand's are to attain better nutritional status and healthy lifestyles (Table 7.2). All these countries have the same major policy objective of improving nutritional status and quality of life of their own population for a healthy lifestyle.

Table -7.2: Food and Nutrition Policy Formulation Process in Bangladesh and the Selected Developing Countries

Formula-tion Process	Bangladesh	India	Philippines	Thailand
Major Policy Objectives	Improve Nutritional Status and Healthy Lifestyle	Remove the Levels of Malnutrition among the Disadvantaged Groups	Improve Nutritio Status, Standard of Living and Quality of Life	Attain Better Nutritional Status and Healthy Lifestyle
Key Policy Issues	Household Food Security; Under-nutrition; Micronutrient Malnutrition; Poverty Alleviation; IEC and Desired Dietary Pattern FBDG	Household Food Security; Undernutrition; Micronutrient Malnutrition; Poverty Alleviation; Convergence of Intersectoral Services; and FBDG	Poverty Alleviation; Community Based Nutrition Intervention; Control of Micronutrient Malnutrition; and Healthy Lifestyle.	Poverty Alleviation; Food Safety and Security; Food Based Dietary Guidelines; Nutrition Intervention; and Healthy Lifestyle
Policy Approach	Multisectoral	Multisectoral	Multisectoral	Multisectoral
Conflicts and Com-promise	Conflicts between Nutrition Experts and Bureaucracy	Conflicts Due to Non-invitation of Some Stakeholders in Policy Formulation Process	Conflicts of understanding between field implementers and local leaders	A good compromise among the stake-holders from the beginning
Lead Sector/ Ministry	Ministry of Health and Family Welfare	Ministry of Human Resource Development	Ministry of Agriculture	Ministry of Public Health
Policy-Keeper	Bangladesh National Nutrition Council	National Nutrition Council (Established in 1995)	National Nutrition Council	National Food and Nutrition Committee
Policy Adoption Period	Sept 1997	1993	Nutrition Act, 1974; Policy, 1987	1980

The key policy issues of Bangladesh and selected developed and developing countries are different. But there are some common issues among the selected developed countries and also some common issues within the developing nations. Bangladesh policy issues are mainly focussed towards household food security, undernutrition, micronutrient malnutrition, and poverty alleviation and follow up of the food-based dietary guidelines.

The policies of the selected developed countries are confined within food-based dietary guidelines, control of over-nutrition in the country, availability of nutritious foods for better health (Table 7.1). Developed country's policy issues on the control of over-nutrition are not related with the Bangladesh policy, but other issues are relevant.

The key policy issues of developing countries are almost similar to the policy issues of Bangladesh, particularly poverty alleviation, household food security, control of micronutrient malnutrition are common in all developing countries (Table 7.2).

The national food and nutrition policy of Bangladesh included a set of broad-based objectives and separate sectoral policy guidelines, while the food and nutrition policies of the developed countries included different strategies against specific objectives. On the other hand, among the developing countries, Philippines and India included specific objectives and sectoral programs and Thailand prioritized plans with phased targets. Poverty alleviation is the common policy issue in all developing countries either food deficient or food sufficient including Bangladesh; but it is not an issue of the selected developed countries, who are also food rich countries. Thus there are dissimilarities of the Bangladesh policy and selected developing country's policy with that of selected developed country's policy on poverty alleviation, although developed countries in different international forums raised their voices on this issue.

The food and nutrition policies of the selected developed countries i.e. USA, Australia and Norway have been focussed to balanced availability of food and its consumption to make the people free from nutrition related diseases like

heart diseases, over-nutrition and obesity. While the policies of selected developing countries i.e. India, Philippines and Thailand are very much concerned with more production and availability of food to the malnourished people and to maintain household food security, which are different than developed countries but similar to Bangladesh.

The national food and nutrition policies of all these developed and developing countries (except India) have documented diet and nutrition goals and targets, while the Bangladesh policy only stated national goals for 1990s without mentioning any target.

The policy formulation of all the developed and developing countries have been done by multisectoral approach, with the participation of all concerned sectors of the country both from government and private sectors. The policy formulation process has the similarity with Bangladesh. During policy formulation process the policy makers of all the selected countries faced conflicts except Thailand, but all these conflicts have been compromised through negotiation and discussion. The lead ministry or department involves in policy formulation process are different for individual countries, but it was limited either within health or agriculture sector except India where the lead ministry is the Ministry of Human Resource Development. The policy keepers are the apex bodies like national nutrition councils or committees in almost all the countries. The governments of all these countries adopted their respective food and nutrition policies between 1974 and 1997. Norway and Philippines have revised their policies in 1981 and 1987 respectively according to the need of their country.

7.2 COMPARISON OF THE IMPLEMENTATION PROCESS OF THE BANGLADESH POLICY WITH THE SELECTED DEVELOPED AND DEVELOPING COUNTRIES' POLICIES

The national food and nutrition policy implementation process in Bangladesh was compared with the implementation process of selected developed and developing countries. It was found that a total of seventeen major and minor sectors are involved in the policy implementation process in Bangladesh. Among

the selected developed countries, policy implementation involved three sectors, like agriculture, health and education in USA; two sectors like health and agriculture in Australia; and three sectors like agriculture, health and industries in Norway (Table 7.3). On the other hand, among the selected developing countries, fourteen different concerned nutrition sectors in India, all concerned nutrition sectors in Philippines and health, agriculture and other sectors in Thailand are participated in nutrition policy implementation through plans and programs (Table 7.4).

Table-7.3: Food and Nutrition Policy Implementation Process in Bangladesh and the Selected Developed Countries

Implementation process	Bangladesh	USA	Australia	Norway
Sectoral Participation	All concerned Sectors (17)	Major 3 Sectors (Agric., Health and Education)	Health and Agric. Sector	Agriculture, Health and Industries
Plans and Programs	NPAN and Five Year Plan; BINP and NNP	NPAN and Sectoral Plans and Programs	Sectoral Plans and Programs	NPAN and Sectoral Programs
Resource Availability	Inadequate Resources Available	Adequate Resources Available from Federal and State Govt.	Adequate Resources from Federal and State Govt.	Adequate Resources from the National Govt.
Coordination: Strong/ Moderate/ Week	Moderate	Strong	Strong	Strong
Monitoring: Strong/ Moderate/ Week	Weak	Strong	Strong	Strong
Political Will: Strong/ Moderate/ Weak	Sometimes Strong and Often Less	Quite Strong at Federal and State Level	Strong at Federal Level but Moderate To Strong in States Level	Quite Strong for Longer Period

It reveals from the data that multisectoral approach (involvement of many sectors) is comparatively more among developing countries than the developed,

while Bangladesh perhaps involved the highest number of sectors in policy formulation and implementation.

The food and nutrition policy of Bangladesh has been reflected in the national plan of action for nutrition (NPAN), fifth five year plan (1997-2002) and different nutrition programs including Bangladesh Integrated Nutrition Project (BINP) and National Nutrition Project (NNP)-1. The United States of America and Norway have reflected the policy in their NPAN, sectoral plans and programs; and Australia reflected their policy in sectoral plans and programs (Table 7.3).

Table-7.4: Food and Nutrition Policy Implementation Process in Bangladesh and the Selected Developing Countries

Implementation process	Bangladesh	India	Philippines	Thailand
Sectoral Participation	All concerned sectors (17)	All major and minor sectors (14)	All concerned sectors	Health, agriculture and others
Plans and Programs	NPAN and Five year plan; BINP and NNP	NPAN and 9th Plan, ICDS and Other projects	PPAN and central and local plans and programs	National Food and Nutrition Plan and targeted Applied Nutrition Programs
Resource Availability	Inadequate resources available	Inadequate resources available from central and States Govts	Moderately available from Central and Local level	Moderately Available from national and provincial Govt.
Coordination: Strong/ Moderate/ Week	Moderate	Weak	Moderate	Weak
Monitoring: Strong/ Moderate/ Week	Weak	Weak	Moderate	Moderate
Political Will: Strong/ Moderate/ Weak	Sometimes Strong and Often Less	Sometimes Strong and Often Moderate	Strong for the Last Few Decades	Strong with Dedication

The nutrition policy of India has been reflected in the NPAN, 9th Plan, Integrated Child Development Services (ICDS) and other concerned projects. The Philippines reflected their policy in Philippine plan of action for nutrition (PPAN),

central and local plans and programs; while Thailand has reflected the policy into national food and nutrition plan and targeted applied nutrition projects (ANPs) (Table 7.4). Therefore, it is observed that there are similarities of reflection of policies in the plan of the selected developed and developing countries with Bangladesh.

The allocation of resources both technical and financial; coordination and monitoring of policy activities; and political will play important role in implementation of the policy. The criteria of availability of resources, coordination and monitoring of policy activities; and political commitment have been categorized as adequate or strong (when more than 75% sufficiency of the requirement), moderate (when more than 50% but less than 75% sufficiency of the requirement), and inadequate or weak (when less than 50% sufficiency of the requirement) based on the information of individual country to compare among them. It was observed that inadequate resources are available for implementation of food and nutrition policy in Bangladesh, while it was adequate in developed countries. The USA and Australia provide resources from federal and state government fund for implementation of nutrition policies through plans and programs and Norway's national government provide resources for policy implementation (Table 7.3). On the other hand, inadequate resources are available from central and states government of India; moderately available from central and local level in Philippines and moderately available from national and provincial government in Thailand (Table 7.4).

The coordination of policy activities is moderate in Bangladesh, but it is strong in selected developed countries and weak in India and Thailand, and moderate in Philippines. Monitoring of policy activities is strong in developed countries, but weak in Bangladesh and India while moderate in Philippines and Thailand. Coordination and monitoring were assessed by regular review meetings held and level of participation of decision-makers. Assessment of political will was quite difficult. Investment of funds for nutrition and related activities and actions against the commitments were considered to assess political will. However from

the information on evaluation of different policies of the selected countries and discussion with different experts in the field, the political will or commitment of Bangladesh is found sometimes strong and often less. It is theoretically there, but practically less than the desired. In USA, the commitment is quite strong at federal and state level; while it is strong at federal level but varies from moderate to strong in state level in Australia and quite strong for a long period in Norway.

The firm commitment of resources and strong political will are the pre-requisite of successful implementation of the policy in Bangladesh.

7.3 COMPARISON OF THE PROGRESS OF THE BANGLADESH POLICY WITH THE SELECTED DEVELOPED AND DEVELOPING COUNTRIES' POLICIES

BANGLADESH

The progress of the national food and nutrition policies of Bangladesh has been compared with the progress of the policies of selected countries. The Bangladesh national food and nutrition policy (NFNP) and national plan of action for nutrition (NPAN) have been approved with identified responsibilities for particular ministries. The policy has been reflected in the sectoral policies, plans, programs and accordingly different nutrition projects are being prepared. The Bangladesh National Nutrition Council has been reactivated, working groups in different concerned sectors have been formed and regular meetings of these groups are organized. The intersectoral steering committee (ISSC) has been constituted and Focal Points for nutrition are nominated in different sectors. Implementation of the NFNP and NPAN are being monitored closely in meetings of BNNC and ISSC respectively. Nutrition programs have been consolidated, coordination among different sectors has been initiated, and many regulatory acts adopted, and achieved some impressive progress in Bangladesh. The rate of underweight, stunting, protein energy malnutrition, vitamin A deficiency, infant mortality, and maternal mortality has been reduced during the last decade. Three weeks (National Nutrition Week, World Breast Feeding Week, Vitamin A Week) and many Day's

(World Food Day, World Health Day, Safe Motherhood Day, etc.) are observed for nutrition in the country. Besides, regular dissemination of nutrition information through Radio and Television are organized in the country. The stakeholders, donors, government and non-government organizations enjoy a congenial environment for nutritional improvement in Bangladesh. The Bangladesh Integrated Nutrition Project has made some nutritional improvement in the project areas and considering the experience of this project government is considering to implement a large National Nutrition Project for wider coverage in whole country.

UNITED STATES OF AMERICA

The United States of America has made linkage between nutrition policy and food and agriculture policy reflecting consumers' attitudes and choices. Relevant Acts and Regulations have been enacted by United States Department of Agriculture (USDA) for the implementation of the policy. The American food guidelines were improved and consciousness on healthy food and diet has been increased through propagation of the Food Guide Pyramid in the country. The prevalence of severe protein energy malnutrition has been limited and nutrient deficiency diseases are almost unknown in USA. The state of overweight in the country has been reduced considerably, but still many things to do. The problems of overweight are reducing by the creation of consciousness through campaign on nutrition.

AUSTRALIA

Australia also started linkage of food and nutrition policy with other relevant policies of the country. This country has introduced food choices for healthy diet (dietary guidelines) and made integration of agriculture, education and health activities very effectively. Government statements on fairer, more prosperous and more just societies for every Australians made it possible to implementation the policy in the country. Regular review and monitoring of the national health and nutrition goals and targets by the Department of Public Health was very important for effective implementation of the policy in Australia.

NORWAY

Norway has experienced mixed success to achieve nutritional goals, but the regional development and food self-sufficiency goal has been largely achieved. Research organizations of Norway have popularized nutrition and health information. The progress was possible due to priority goals and resource allocation towards healthy lifestyles. According to the policy there were increased production of foods, which provides food security not only to the Norwegians but also to the food-poor countries. The changes in dietary habits, reduction of nutritional disorders and obesity were also achieved due to the progress of the effective food and nutrition policy in Norway.

INDIA

Indian national nutrition policy has been reflected in national plan of action on nutrition and 9th National Plan of India and also linked the policy with other policies. Green revolution made tremendous achievement in food self-sufficiency (rice, fruits, vegetables, and milk) in India and made it possible to avert large famines in the country. The experiences of Tamil Nadu Integrated Nutrition Project and Integrated Child Development Services (ICDS) to improve nutrition have been merged into a nationwide ICDS program. The Indian policy is addressing food security, poverty alleviation, removal of PEM and micronutrient malnutrition, and also reduction of infant mortality rate, maternal mortality rates and total fertility rates to a significant level. Mid-Day-Meal for schools children and income generation schemes have been strengthened and Public Distribution System (PDS) has been changed to Targeted PDS in the country.

PHILIPPINES

Philippines has recognized nutrition as an important issue for development and constituted the National Nutrition Council by Nutrition Act in 1974. The policy has been reflected in Philippines Plan of Action on Nutrition. This country has set legislative and development policy agenda for nutritional improvement.

Alleviation of poverty, institutionalization of nutrition surveillance system, nutrition advocacy to change dietary habits is progressing in the country. Strong commitment of national leadership and resource allocation according to programs reduces undernutrition, infant mortality rates, under five mortality rates and total fertility rates in Philippines.

THAILAND

Thailand's policy has been transformed into different plans fixing targeted priority, e.g. multisectoral nutrition planning, poverty alleviation plans, campaign for quality of life, etc. The applied nutrition project has been implemented in the country, which showed dramatic reduction of severe and moderate PEM, low birth weight, infant mortality rates, maternal mortality rates, and total fertility rates. All these successes were observed due to action against poverty and ignorance in Thailand. Community-based nutrition program, growth monitoring and promotion, supplementary feeding, information, education and communication on nutrition, school lunch program have contributed to improve the quality of life. Commitment of the leaders and professionals made the progress of the policy successful by taking targeted measures and using required resources.

The progress of policies of developed countries, particularly in dramatic reduction of undernutrition from the respective country and also the problems of overnutrition, obesity and diet related diseases would be a lesson for developing countries, especially Bangladesh. Increased food production in food rich countries after fulfilling the nutritional requirement of the nation can compensate foods to the food poor countries to solve their problems of undernutrition. The food production is also increasing in Bangladesh and other developing countries, people are being modernized, habituated in fast foods and street foods, their food habits are also being changed and tends to have overweight and obesity. Therefore, Bangladesh and other developing countries need to be alert of the double burden of malnutrition, i.e. undernutrition and overnutrition and policies be formulated accordingly.

7.4 COMPARISON OF DIFFERENT BASIC, ECONOMIC AND NUTRITIONAL DEVELOPMENT INDICATORS OF BANGLADESH AND SELECTED DEVELOPED AND DEVELOPING COUNTRIES

7.4.1 Difference of Demographic Indicators of Bangladesh and Selected Developed and Developing Countries

The demographic indicators like population, annual growth rate, population density, life expectancy at birth and percentage of urbanized population of Bangladesh has been compared with that of selected developed and developing countries. The population of Bangladesh, USA, Australia, Norway, India, Philippines and Thailand was increased from 110.6, 252.7, 17.3, 4.3, 866.5, 62.9 and 57.2 millions in 1991 (102) to 125.6, 270.0, 18.8, 4.4, 979.7, 75.1 and 61.1 millions in 1998 respectively (117) (Table-7.5).

A decreasing trend of annual growth rate of population was observed in Bangladesh and the selected developed and developing countries (Table 7.5) from the recent data. The average annual growth rate in Bangladesh, USA, Australia, Norway, India, Philippines and Thailand has been declined from 3.7, 1.7, 2.4, 0.8, 3.5, 4.4, and 2.7 percent during 1980-90 to 1.9, 1.1, 1.3, 0.6, 2.0, 2.6, and 1.4 percent during 1990-98 respectively (117).

The population density of the country is 965 persons per square kilometer in 1998, which is the third highest of the world (117). Bangladesh population is denser than any other selected countries. The population density of Bangladesh is 482 times more than Australia, about 69 times more than Norway, 33 times more than USA, 3 times more than India, about 4 times more than Philippines and 8 times more than Thailand (Table 7.5).

The agricultural and population policy efforts of the government of Bangladesh for increase in production, availability and consumption of foods for food security of such dense population and decrease in population growth rate is essential to complement successful implementation of food and nutrition policy.

Table-7.5: Demographic Indicators of Bangladesh and the Selected Countries

Countries	Total Population (in million)		Average Annual Growth Rate (%)		Popula-tion Density (People/ Square km)	Life Expectancy at Birth (Years)		Percentage of Urbanized Population	
	1991 a	1998 b	1980-90 b	1990-98 b	1998 b	1970 c	1997 c	1980 b	1998 b
Bangladesh	110.6	125.6	3.7	1.9	965	44	58	11	20
USA	252.7	270.0	1.7	1.1	29	71	77	74	77
Australia	17.3	18.8	2.4	1.3	2	71	78	86	85
Norway	4.3	4.4	0.8	0.6	14	74	78	71	74
India	866.5	979.7	3.5	2.0	330	49	62	23	28
Philippines	62.9	75.1	4.4	2.6	252	57	68	37	57
Thailand	57.2	61.1	2.7	1.4	120	58	69	17	21

Data Source: a. World Development Report 1993: Investing in Health. (1993). World Bank. Oxford University Press Inc. p. 238-9.
b. Entering the 21st Century World Development Report 1999/2000. World Bank. Oxford University Press Inc. p. 230-251.
c. The State of the World's Children 1999. (1998). UNICEF. United Nations Children's Fund. p. 94 –127.

The life expectancy at birth has been increasing among all the countries. It was 58 years in Bangladesh in 1997 while at the same period it was ranged between 77 to 78 years in selected developed countries and between 62 to 69 years in selected developing countries. Bangladesh has to increase the life expectancy, which requires a lot of multisectoral efforts.

The urbanization is gradually increasing in Bangladesh, because of migration of people from rural areas to cities and towns for searching of jobs and income. The urban population is increasing among all the selected countries except Australia. The rate of increment is higher in developing countries than the developed countries. The urbanized population in Bangladesh has increased from 11 percent in 1980 to 20 percent in 1998 (117). Many of the migrated people live in urban slums and their nutrition situation is worse than the rural poor in

Bangladesh. The data clearly indicated that the situation of Bangladesh is very crucial compared to any of the selected countries.

7.4.2 Comparison of Economic Progress of Bangladesh and Selected Developed and Developing Countries

The economic progress in terms of gross national product (GNP), average annual growth rate of GNP, average annual growth rate of gross domestic product (GDP) and gross domestic investment of Bangladesh has been compared with the selected developed and developing countries. There is an increasing trend in per capita gross net product (GNP) in the country. The GNP has been increased from US$ 220 in 1991 (102) to US$ 260 in 1996 (140) and US$ 350 in 1998 (117). The increment of GNP in Bangladesh is not satisfactory, as it is the lowest (only US$ 350 in 1998) among the compared countries (Table 7.6). The average rate of growth of GNP was 2.7 percent in 1990-96 (140), which has further increased to 3.4 percent during 1997-98 in Bangladesh (117). Annual growth rate of GNP in Bangladesh was increasing as increased in the selected developed countries and India in 1997-98; while it decreased in Philippines (-2.1%) and Thailand (-8.5%) at the same period (Table-7.6).

The average annual growth rate of gross domestic product (GDP) in Bangladesh has shown the rising trend, i.e. it increased from 4.3 percent in 1980s to 4.8 percent in 1990s (117).

It reveals from Table 7.6 that the average annual growth of gross domestic product (GDP) has been increased in all countries at different rates from 1980s to 1990s except in USA and Thailand. Annual growth rate of GDP in USA, Australia, Norway, India, Philippines and Thailand were 3.0, 3.4, 2.8, 5.8, 1.0, and 7.6 percent in 1980s and 2.9, 3.6, 3.9, 6.1, 3.3, and 7.4 percent in 1990s respectively. On the other hand, the percentage of gross domestic investment in Bangladesh was the higher (7.0%) than the selected comparable developed and developing countries (4.1% to 6.5%).

Table –7.6: Economic Progress of Bangladesh and the Selected Countries

Countries	Gross National Product (GNP) (per capita in US$)			GNP Average Annual Growth Rate (%)		Gross Domestic Product (GDP) Average Annual Growth Rate (%)		Gross Domestic Investment (% in growth)
	1991 a	1996 c	1998 b	1990-96 c	1997-98 b	1980-90 b	1990-98 b	1990-98 b
Bangladesh	220	260	350	2.7	3.4	4.3	4.8	7.0
USA	22240	28020	29340	1.2	2.8	3.0	2.9	5.8
Australia	17050	20090	20300	2.7	2.6	3.4	3.6	5.4
Norway	24240	34510	34330	3.7	1.8	2.8	3.9	4.1
India	330	380	430	3.8	4.2	5.8	6.1	5.9
Philippines	730	1160	1050	1.0	-2.1	1.0	3.3	4.4
Thailand	1570	2960	2200	6.7	-8.5	7.6	7.4	6.5

Data Source: a. World Development Report 1993: Investing in Health. (1993). World Bank. Oxford University Press Inc. p. 238-9.
b. Entering the 21st Century World Development Report 1999/2000. World Bank. Oxford University Press Inc. p. 230-251.
c. The State of the World's Children 1999. (1998). UNICEF. United Nations Children's Fund. p. 94 –127.

Nutritional conditions are very rightly considered in economic terms. The malnourished population could not contribute so much to the economic progress of a nation as desired compared to the well-nourished people. But the economically sound population could contribute to the nutritional improvements. Poverty in developing countries is one of the major factors that hinder improvement of nutritional status and accordingly poverty alleviation is the major policy issue in developing countries. Anyway this is not a policy issue of the developed countries.

7.4.3 Comparison of the Reduction of Mortality Rates of Children and Mothers of Bangladesh and Selected developed and Developing Countries

The trends of mortality rates of infants, under-5 children and mothers of Bangladesh and selected developed and developing countries are different. It is

found from Table 7.7 that the under-5 mortality rates in Bangladesh have been reduced from 211 per 1000 live births in 1980 to 104 per 1000 live births in 1997. The under-5 mortality rate in Bangladesh was much higher than the selected developed (8 per 1000 in USA, 7 per 1000 in Australia and 6 per 1000 live births in Norway in 1997) and developing (88 per 1000 in India, 41 per 1000 in Philippines and 38 per 1000 live births in Thailand in 1997) countries.

The Table 7.7 also showed that the infant mortality rates in Bangladesh has been dramatically reduced from 132 per 1000 in 1980 to 75 per 1000 in 1997, but it was higher than the selected developed (7 per 1000 in USA, 5 per 1000 in Australia and 4 per 1000 live births in Norway) and developing (71 per 1000 in India, 35 per 1000 in Philippines and 33 per 1000 live births in Thailand) countries. The infant mortality rate in Bangladesh has been further reduced to 66 per 1000 live births in 1999.

Table –7.7: Reduction of Mortality Rates of Children and Mothers of Bangladesh and Selected Countries

Countries	Under 5 Mortality Rate (Per 1000)		Infant Mortality Rate (Per 1000)		Maternal Mortality Rate (Per 100000 life births)
	1980 b	1997 b	1980 b	1997 b	1980-97 c
Bangladesh	211	104	132	75	440
USA	15	8	13	7	12
Australia	13	7	11	5	9
Norway	11	6	8	4	6
India	177	88	115	71	440
Philippines	81	41	52	35	210
Thailand	58	38	49	33	44

Data Source: b. Entering the 21st Century World Development Report 1999/2000. World Bank. Oxford University Press Inc. p. 230-251.
c. The State of the World's Children 1999. (1998). UNICEF. United Nations Children's Fund. p. 94 –127.

The maternal mortality rate in Bangladesh and India were 440 per 100000 life births, but it was found much less in all other selected countries. The maternal mortality rate in USA, Australia, Norway, Philippines and Thailand were 12, 9, 6, 210, and 44 per 100000 live births respectively.

All these reductions were possible in Bangladesh because of the commitment of the government. The success of Expanded .Program on Immunization in Bangladesh was possible because of the commitment of the then President, for universal child immunization in the UN assembly's 40th session in 1985 and the collaborative participation of all different sectors including government and non-government organizations, civil societies, school teachers, boy scouts, girl guides, health workers, religious leaders, etc. Immunization coverage increased from 2 percent in 1985 to 70 percent in 1990 (67), which is one of the important interventions to the reduction of mortality rates in infant, under-5 children and mothers. The immunization coverage is more than 80 percent in 1999. National immunization days are observed to immunize all children against common childhood killers. Besides, remarkable decline in vitamin A deficiency has undoubtedly improved child survival in rural Bangladesh as well as prevented child blindness (82) and successful breastfeeding campaign has reduced the infant mortality rate in Bangladesh. The practical knowledge of simple preparation technique of oral rehydration solution (ORS) by almost everyone in the community and compliance of consumption of ORS has also reduced the incidence of diarrhea among children resulting in reduction of infant and under-5 mortality rates in Bangladesh.

The world leaders in different international/world forums have made similar commitments during last decades for child survival particularly in the reduction of mortality rates and several actions and policy decisions of the governments undertaken. Public health measures such as immunization, improved access to safe water and sanitation facilities and mass information campaigns saved millions of lives, which were supposed to die from communicable diseases and preventable illness. More than two thirds of all the world children under five years old – 450

million – were immunized against polio in 1998 alone. In India that year, health workers and volunteers vaccinated 134 million children during National Immunization Days (250). Positive results of the commitments and policies of the countries are reflected in Table-7.7. Besides, exchange of ideas, knowledge and awareness on these important issues as well as commitments of the individual governments in different world forums and summits made these trends of declining possible.

The nutritional status of the people in the country is improving as the government has taken certain measures and made commitment to improve the situation through an integrated approach and appropriate planning.

7.4.4 Comparison of the Nutrition Situation in Bangladesh and Selected developed and Developing Countries

The nutrition scenario in Bangladesh was quite different than any other countries. Every alternate baby in this country are born with low birth weight during 1990-97, which was found to be much higher than any other selected countries (Table 7.8). The rate of low birth weight infants were 7 percent in USA, 6 percent in Australia, 4 percent in Norway, 33 percent in India, 9 percent in Philippines and 6 percent in Thailand. The countries, which have improved the nutritional status of women starting from adolescence, have the improved conditions in terms of low birth weight. Philippines and Thailand have shown remarkable success in reduction of low birth weight while Bangladesh and India have to strengthen activities towards improvement of maternal nutrition.

The BINP has made some success in their project area in maternal nutrition and accordingly NNP will continue the activities for maternal nutrition (i.e., supplementary feeding to the highly distressed pregnant and lactating women and strong information, education, and communication package for adolescent nutrition) throughout the country.

Table-7.8: Nutrition Situation in Bangladesh and the Selected Countries

Coun-tries	% of Infant with LBW (1990-97)	% of Children (1990-98) who are			% of Under-Fives (1990-97) suffering from			Vit. A Supple-ment coverage rate (6-59 m) 1998	% of HHs Consu-ming Iodized Salt 1992-98
		Exclu-sively breast-fed (0-3 m)	Breastfe with Comp. Food (6-9 m)	Still Breast-fed (20-23 m)	Under-weight Moder-ate and Severe	Wasting Moder-ate and Severe	Stunting Moder-ate and Severe		
Bangla-desh	50	52	69	90	56	18	55	95	78
USA	7	-	-	-	1	1	2	-	-
Austra-lia	6	-	-	-	-	-	-	-	-
Nor-way	4	-	-	-	-	-	-	-	-
India	33	51	31	67	53	18	52	25	70
Philip-pines	9	33	52*	18	28	6	30	80	15
Thai-land	6	4	71	27	19	6	16	4	50

'-' means data not available

Data Source:

c. The State of the World's Children 2000. (1999). UNICEF. United Nations Children's Fund. p. 88–91.

* The State of the World's Children 1999. (1998). UNICEF. United Nations Children's Fund. p. 94 –127.

The breastfeeding practices in Bangladesh, particularly the percentage of exclusive breastfeeding (0-3 months), breastfed with complementary food (6-9 months) and still breastfed (20-23 months), were better than all the selected developing countries (Table-7.8). It was possible to create a breastfeeding environment in Bangladesh because of the strong government policy as well as commitment of a group of dedicated people work under "Campaign for the Promotion and Protection Breast Feeding (CPPBF)" since 1989, which is now known as Bangladesh Breastfeeding Foundation (BBF). The data on breastfeeding were not available for the developed countries.

The percentage of severe and moderate underweight, wasting and stunting in the under-5 children were almost similar in Bangladesh (56, 18 and 55%

respectively in 1990-97) and India (53, 18 and 52% respectively in 1990-97), but these rates were much higher than the rates of Philippines (28, 6 and 30 % respectively in 1990-97) and Thailand (19, 6 and 16 % respectively in 1990-97) (Table 7.8).

The coverage rates of vitamin A supplementation and consumption of iodized salt were higher in Bangladesh than the selected developing countries. The vitamin A supplement coverage rate (6 - 59 months) was 95 percent in 1998 and the iodized salt consuming households were 78 percent during 1992-98 in Bangladesh (141). The policy and programs on the coverage of these micronutrients have created tremendous impact on the state of their improvements in Bangladesh.

7.4.5 Comparison of Access to Safe Water, Sanitation, Communication Media and Adult Literacy Rate in Bangladesh and Selected developed and Developing Countries

Improvement of nutritional status of the population requires a lot of actions from the government as well as from the community and the people. There is no alternative to provide safe water and sanitation facilities to reduce infection and to create awareness of the problems of malnutrition and their solutions. Therefore, access to safe drinking water, sanitation, communication media and literacy rate may also reflect state of health and nutrition of a country. The access of Bangladeshi population to safe water, sanitation, communication media (newspapers, radios and televisions) and the adult literacy rates were compared with that of the selected developed and developing countries. The Table 7.9 below showed that the total percentage of population of Bangladesh with access to safe water (95%) was higher than the selected developing countries (India 81%, Philippines 84% and Thailand 81%). The sanitation in Bangladesh (43%) was better than India (29%) but not better than Philippines (75%) and Thailand (96%). The data on access to safe water and sanitation of the selected developed countries were not available, perhaps because of its universal provisions in the country.

Table-7.9: Percentage Distribution of Population with Access to Safe Water, Sanitation, Communication Media and Adult Literacy Rate in Bangladesh and Selected Developed and Developing Countries

Countries	Total % of Population with access to					Adult Literacy Rate (%)			
	Safe Water	Sani-tation	News Papers	Radios	Televi-sions	Male		Female	
	1990-97 c	1990-97 c	1996 b	1996 b	1997 b	1980 c	1995 c	1980 c	1995 c
Bangla-desh	95	43	2.8	5.0	0.7	41	49	17	26
USA	-	-	21.2	211.5	84.7	99	-	99	-
Australia	-	-	29.7	138.5	63.8	-	-	-	-
Norway	-	-	59.3	92.0	57.9	-	-	-	-
India	81	29	-	10.5	6.9	55	66	25	38
Philip-pines	84	75	8.2	15.9	10.9	91	95	89	94
Thailand	81	96	6.5	20.4	23.4	92	96	84	92

'-' means data not available

Data Source:

b. Entering the 21st Century World Development Report 1999/2000. (1999). World Bank. Oxford University Press Inc. p. 238-251.

c. The State of the World's Children 1999. (1999). UNICEF. United Nations Childrens Fund. p. 94 –127.

The total percentage of population with access to communication media in Bangladesh was compared with that of the selected developed and developing countries. Table-7.9 shows that access of Bangladeshi people to the communication media, like news paper and radio were 2.8 percent and 5.0 percent respectively in 1996 and television were 0.7 percent in 1997 (117). It was found that the people of the selected countries have comparatively several times more access than the people of Bangladesh to newspapers and radios in 1996, and televisions in 1997 (Table 7.9).

The adult literacy rate in Bangladesh is quite low compared to many developing countries. The rate has been increased in male from 41 percent in 1980 to 49 percent in 1995 and in female from 17 in 1980 to 26 percent in 1995 (140).

But the adult literacy rate of Bangladesh was not better than the selected countries when compared with them (Table-7.9). Although some comparable data were not available for the selected developed countries, might be due to universal adult literacy in those countries.

7.5 LESSONS LEARNT ON THE POLICY ACTIVITIES

The national food and nutrition policy of Bangladesh is, however, quite different than that of the policies of developed countries like the United States of America, Australia and Norway; and also than the policy of developing countries like India, Philippines and Thailand. This may be happened because of individual country's situation and need. The national food and nutrition policy of Bangladesh included a set of broad-based objectives and different independent sectoral strategies separately, while the food and nutrition policies of the United States of America, Australia and Norway stated different strategies against each specific objective. Even the food and nutrition policy of New Zealand, Papua New Guinea (PNG) and Tanzania also followed the same process. The food and nutrition policy of Australia emphasized coordinated efforts between different sectors, public, private and non-government agencies and also the Australian consumers. The Bangladesh nutrition policy also emphasized on coordinated efforts among different sectors. The PNGs food and nutrition policy included three major targets. The Australian food and nutrition policy did not mention any target, but only stated that as part of the implementation of the policy, diet and nutrition goals and targets will be defined which will relate to the overall National Health Goals and Targets. Bangladesh food and nutrition policy did not clearly mention any target, but only stated that the national goals of different sectors and the national nutrition goals for 1990s in the light of global goals will be achieved. But there are similarities in the policy formulation process too among the discussed developed and developing countries. Above all, the ultimate goal of all the national food and nutrition policies are to improve the health and nutritional status of the populations of individual countries, although the strategies are not always the same.

The nutrition situation in USA, Australia and Norway are quite satisfactory as the governments have been committed and the policy makers and the nutrition scientists are giving continuous efforts to improve it. Consciousness about health and nutrition among the population of these countries has been created through continuous efforts. The nutrition situation in India is gradually improving as the government is committed and considers it as human right rather than only development. The Philippines government is also committed to the implementation of the national food and nutrition policy and Philippines plan of action on nutrition. The nutrition scenario in Thailand has remarkably improved because of their King, who is committed to his people and the people also abide by the directives of the King. Not only that the policy makers and the nutrition scientists are giving serious thought to improve the situation through a concerted effort and effective planning. It requires a unique bridge of political will and commitment of the government and participation of the sectors, community and the public to implement the policy guidelines for the improvement of nutritional status of the country.

7.5.1 Interactions among Different Government Policies

The need for cooperation and collaboration at national, regional and international levels cannot be over emphasized. In policy-making process there are great differences between countries with regard to the basis for plans and decisions. Different countries will always be at different stages of experience with policy making and implementation. The developed country's food and nutrition policies are concerned with balanced food availability and consumption to make the people free from heart diseases, over-nutrition and obesity, while the developing country's nutrition policy concerned with more production and availability of food to the malnourished people to remove undernutrition. The individual government's food and nutrition policies are based on the individuals problems and needs, but all these policies share international experiences and have an international goal i.e. to improve the nutritional status of the population and quality of life. The scope of attention in

food and nutrition as viewed by many policy makers must include food-poor nations, because the multisectoral problem of over-nutrition in food-rich countries is tied to the solution of undernutrition in food-poor countries (21).

Although green revolution made some remarkable changes that have been observed in many parts of the developing countries. The per capita food supplies in the developing world rose from 1900 calories per day in the early 1960s to 2500 calories in the early 1990s, even though the population doubled during the same period. India produces substantial food surpluses, yet malnutrition persists throughout the country. Similar examples in other countries where malnutrition is widespread despite self-sufficiency in food grains are Pakistan, Indonesia and Bangladesh.

The delegates, at the World Food Conference of 1974, had the desire that food insecurity, hunger and malnutrition would be eradicated within 10 years. But about two decades later, it was confirmed at the International Conference on Nutrition (December 1992) that in many parts of the world the desire has still to be fulfilled. Despite advancement in agricultural production, some 800 million people in the developing world are still chronically undernourished, lacking sufficient food to live healthy and productive lives. Millions more suffer from specific nutrition deficiencies.

Why so many people still go hungry or suffer from specific nutrition deficiencies despite advances in science and technology and efforts of the people, governments and development partners? Where was the problem? Was it lacking of concerted efforts or coordination? Was there inadequate commitments and dedication? We have to search the answers. Probably appropriate policy for nutritional development and actions to implement the policy through commitments and dedication is the possible answers.

7.5.2 Ownership of the Policy

The formulation of food and nutrition policies as well as their implementation would be better if these are owned collectively by the stakeholders. The interested

sectors involvement from the very beginning of policy formulation process create an environment of participation which ultimately serve the purpose of ownership and sharing of responsibilities in policy implementation. The sectors who were concerned with food and nutrition and relevant subjects were invited to the policy making process in Bangladesh. But a few sectoral representatives attended were not at all from the appropriate level who can give their sectoral policy decisions, which in turn delay the policy making process. However, it was overcome with the initiative of the members of the Standing Technical Committee of BNNC. The political commitment also played appropriate role in the policy process.

7.5.3 Responsibilities for Food and Nutrition Policy

A policy keeping body must have not only the capacity for information gathering, development, and dissemination but also have access to policy makers and policy making processes. It requires enough authority or influence to be heard by target organizations and media and to affect the agendas, priorities, and resource allocation of target governmental units and other organizations (27). The formal authority is not powerful until it is activated by political will. It was observed in most of the cases that the government ministries has the authority but often not the will, while policy keeping body has the will but not the authority to act decisively. Besides, the credibility and visibility, authority and other resources, policy-keeping leadership must be accountable to the government and the public. In Bangladesh context, the BNNC has been working as the policy keeping body. It should have the authority of implementation of the policy as well as accountability to the government and the public. Besides, the food and nutrition policy of Bangladesh should define the responsibilities of individual sectors/ ministries and organizations like the policies of developed countries.

7.5.4 Advisory Functions

The advisory functions of the BNNC include: ensure an atmosphere of nutritional problem identification and program development for their solution;

provide a multisectoral forum where different nutrition related sectors can meet and ensure solutions proposed are acceptable to the different interested sectors; suggest practical measures and activities that help to implement food and nutrition policy effectively. In Norway, the "Interdepartmental Collaborative Body for Nutrition" is working for coordination between the sectors involved in nutrition policy implementation. While in Bangladesh, the function of advisory council and coordinating mechanism is covered by the BNNC. This task is not very easy. If the sectoral interests are served the sectors are ready to cooperate and if not, they are not even willing to share their activities report. But strong coordination among the sectors is the prerequisite for implementation of food and nutrition policy successfully.

Chapter 8

CONCLUSIONS AND RECOMMENDATIONS

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8.1 CONCLUSIONS

The national food and nutrition policy of Bangladesh is a multisectoral and consensus policy approved by the Cabinet. Considering its importance almost all sectors concerned with nutrition were involved in the policy formulation process. According to the definition of food and nutrition policy, and considering the formulation process, contents and implementation strategies of food and nutrition policies of many developed and developing countries, the adoption of the national food and nutrition policy of Bangladesh with the consensus of stakeholders is a good step. Involvement of stakeholders in formulation process provides them ownership and encouraged them to share responsibilities of the policy implementation. In spite of so many difficulties and limitations the Bangladesh National Nutrition Council has created an environment of national food and nutrition policy making through multisectoral approach.

Once policy is adopted, the strategic task is to translate it into social reality through planned actions by means of programs. Therefore, reflection of national food and nutrition policy into national plan of action for nutrition and five year development plans as well as implementation of nutrition programs are important policy activities in Bangladesh. An effective food and nutrition policy would require a number of programs in order to achieve its objectives. The aim of strategic policy planning is to create a supportive climate in which implementation can occur and to get relevant organizations fully deploy specific policy components.

An evaluation was done according to the criteria for effectiveness of policy implementation. It was observed that the food and nutrition policy of Bangladesh has fulfilled almost all the 'success elements' of an ideal effective policy. The policy of Bangladesh was found quite effective and suitable to develop and implement. Because it has established appropriate goals and objectives, and also means such as, programs and activities to meet the goals and objectives. It has implements like BNNC and other committed stakeholders that activate or control means, and also the

constraints like food insecurity, poverty, inadequate resources etc. that are applied to plans and programs to improve the nutritional status of the people. But the policy has achieved some impressive progress, which are encouraging to the policy-keeper, policy-makers, stakeholders and beneficiaries.

The national food and nutrition policy of Bangladesh has strong strengths such as, consensus document emphasizing human rights, formulated by multisectoral approach, complementary to other policies of the Government with ownership; broader goals and objectives with wider coverage, and enabling document to implementing the policy. But it has also some weaknesses like, lack of implementation, monitoring and evaluation guidelines; lack of strong commitment and earmarking of fund; policy-keeper's inadequate leadership, authority and support; ambitious target and that the policy ignored the lessons learned. There are more opportunities i.e., social mobilization of the policy to make aware of the contents of the policy; wider scope of the policy to act according to necessity; suggested programs and measures to improve nutrition status; the policy environment is congenial; and has modification scopes of the policy. The threats of the policy as identified include, lack of knowledge about the policy; lack of resources for BNNC; lack of trained personnel and management capacity to implement policy, plans and programs; tension between technical people and bureaucrats; vested interest of business companies; and discontinuity of political will and commitment due to changes of political parties in the Government.

Utilizing the opportunities properly to implement the national food and nutrition policy, the weaknesses of its implementation can either be eliminated or be converted in to strengths and as a consequence, influence of threats can be minimized.

The threats are not so strong against implementation of the policy. Opportunities could be utilized as much as possible involving the beneficiaries, the community, all stakeholders, professionals, donors and development partners through regular dialogue and dissemination of the policy activities. Since none of

the internal and external policy environments are static, the policy makers and strategists need to prepare several SWOT matrices at different points in time to assess the continued effectiveness. Thus it would again require a more concerted effort of the stakeholders for effectively and suitably implementing the policy guidelines, since it is a continuous process. The problems of malnutrition need to be drastically reduced by the effective implementation of the policy guidelines.

Despite many difficulties in implementing a holistic approach to alleviate malnutrition, nutrition policies and programs needs to be implemented at the national level. Availability of information on the magnitude and severity of malnutrition must exist and be prepared in a message to communicate to the policy-makers and other beneficiaries. Innovative and effective communication is necessary to create environment so that the political will and commitment are increased in the country. Nutrition education to all categories of the population is essential. Community participation using a community-based approach to the nutrition problem solving should be encouraged. Increased public awareness on nutritional issues may also create public pressure to the politicians to act upon the problems.

Policies are effective when originate by powerful officials of the country, who can influence the shape and the implementation of the public agenda. Policy-keeping body must have enough capacity, authority and access to policy makers and policy making process. Besides, the policy-keeping leader should be accountable to the government and the public. In most of the countries the Government ministries have the authority but often not the will, while policy-keeping body has the will but not the authority to act decisively. There should be good integration among them.

Regular review and monitoring meetings on the progress of implementation of the national food and nutrition policy, the national plan of action for nutrition, nutrition programs and projects are useful. The barriers of implementation and suggestions of improvement might come up through these review and monitoring meetings, which will provide future directions of policy changes. Explicit policies

in food and nutrition either self-contained policies or components of broad-based development policies are essential to strengthen and facilitate nutrition improvement efforts. Successful implementation of food and nutrition policy or large-scale nutrition programs requires favorable environments of political stability, economic growth and organizational structures.

Nutrition policies are different for individual country. But all policies have a common international goal, i.e. to improve the nutritional status and quality of life of the people. The national food and nutrition policy of Bangladesh included a set of broad-based objectives and separate sectoral policy guidelines. The food and nutrition policies of developed countries included different strategies against specific objectives; while food and nutrition policies of Philippines and India included specific objectives and sectoral programs, and Thailand prioritized plans with phased targets. Poverty alleviation is a policy issue in all developing countries (India, Philippines and Thailand) including Bangladesh; while it is not an issue for developed countries (USA, Australia and Norway). The selected developed country's food and nutrition policies are concerned with balanced food availability and consumption to make the people free from heart diseases, over-nutrition and obesity. The selected developing country's food and nutrition policies are concerned with more production and availability of food to the malnourished people, which is similar to Bangladesh. Multisectoral problem of overnutrition in food-rich countries is tied to the solution of undernutrition in food-poor countries. The assistance in terms of food aids from food rich countries (having problem of overnutrition) can solve the problem of inaccessibility of food among the distressed people in the food-poor countries (having undernutrition). The national food and nutrition policies of selected developed and developing countries (except India) have documented diet and nutrition goals and targets to relate with health goals and targets; while the policy of Bangladesh did not mention any target, it has only stated national goals of different sectors for 1990s.

Rearranging the sectoral strategies against each major objective may further modify the policy document of Bangladesh. Goals and targets may be specifically

mentioned or annexed with the policy document. Inclusion of a policy statement comprising of major goal, priority implementation objectives, targets, responsibilities of different sectors including the communities and review procedure would improve the policy. A policy implementation module might provide guidance of the policy implementers. In developing programs as part of the implementation of the food and nutrition policy, the government will have to ensure high priority to matters affecting the access to a nutritious diet by the vulnerable groups particularly women and children. The dietary guidelines for Bangladesh, already prepared should be disseminated in the country. The policy keeper (BNNC) is lacking of enough authority to pursue these issues with different sectors and stakeholders of the policy. To strengthen public and political policy support for meeting changing conditions and to get definite action from government and other stakeholders, the policy keeper should use its authority and resources to do its job. The policy keeper may use the communication media regularly and seek public opinion about different policy issues and be accountable to the elected officials and thus ensure the "political will". The mix of political and staff representation on policy keeping bodies and their joint participation in decision making process determines their authority and activism is a strategic issue. The successful implementation of the food and nutrition policy will be dependent on the strong and effective coordination of different stakeholders concerned with nutrition.

8.2 RECOMMENDATIONS

Based on the above results, analysis, discussions and conclusion the following recommendations are made for effective and suitable implementation of the national food and nutrition policy of Bangladesh:

1. The national food and nutrition policy of Bangladesh should be disseminated, among the parliamentarians, policymakers, donors, bureaucrats, stakeholders, professionals, community leaders, field workers, and beneficiaries for effective implementation and continued commitment.

2. Regular dialogues on the implementation of the national food and nutrition policy with professionals, development partners, food and salt industrialists should be continued to avoid conflicts.
3. A policy statement comprising of major goals, priority implementation objectives, targets and responsibilities of different sectors including communities, and allocation of funds should be stated for short and long term period in the document and a module on policy implementation, monitoring and review process should be prepared for guidance.
4. Strong coordination among the stakeholders should be established by organizing regular monitoring meetings of the policy and taking steps to transform policy into actions by developing sectoral nutrition programs/ projects on priority basis with adequate technical and financial supports to the sectors.
5. The policy-keeper should be given adequate authority to exercise and resources (both technical and financial) for socialization and implementation of the policy successfully.
6. The Government and NGOs should be motivated for developing expertise in nutrition through appropriate training and creating posts of Nutritionists in sufficient numbers for the efficient management and supervision of nutritional activities.
7. The policy-keeper should use the communication media regularly to inform the public about the progress of the national food and nutrition policy.
8. The most desirable strategy of efficient and suitable implementation of the national food and nutrition policy of Bangladesh would be the utilization of strengths to take advantage of opportunities. That is minimizing threats, utilizing opportunities to remove weaknesses and to improve upon the strengths.
9. The policy makers and strategists need to prepare several SWOT matrices at different points in time to assess the continued effectiveness.

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Appendix–I: CHECKLIST FOR OBSERVATION

1. Documents on national food and nutrition policy formulation
2. Availability and adequacy of the national food and nutrition policy document in the policy keepers office
3. Availability of relevant documents for policy implementation (National Plan of Action for Nutrition and Government's Five Year Development Plan)
4. Reflection of policy into plans and programs
5. Demands, distribution and dissemination of policy documents
6. Role of policy keeper
7. Follow-up of activities of implementation of the policy

Appendix–II: GUIDELINES FOR INTERVIEWING ALL KEY INFORMANTS

1. Do you think that the national food and nutrition policy is important for the improvement of nutritional status of the population? If so, why?
2. What are the strengths of national food and nutrition policy of Bangladesh? Could you please explain?
3. Is there any weakness of the national food and nutrition policy? What are those? Please explain.
4. What are the opportunities/scopes of the national food and nutrition policy? Please explain.
5. What are the possible threats of the national food and nutrition policy? Please explain, why these may be the threats?
6. Is national food and nutrition policy suitably and effectively being implemented?
7. What are the barriers towards implementation of the national food and nutrition policy?
8. In your opinion, What are the factors for successful implementation of the national food and nutrition policy?

9. Is there any gaps/lacking in the national food and nutrition policy, which needs to be incorporated? What are those?

GUIDELINE FOR POLICY-MAKERS

1. Did you face any conflict during national food and nutrition policy making? How these compromised?
2. Did you find stakeholders whole-hearted support in policy formulation process?
3. Why policy making was so lengthy? Was there any lack of commitment?

GUIDELINE FOR POLICY-IMPLEMENTERS

1. Did you involve yourself in the process of national food and nutrition policy making at the beginning?
2. Do you think this policy is easily implementable?
3. What are the problems in policy implementation?

GUIDELINE FOR ACADEMICIANS

1. What is the role of academicians in policy formulation, implementation and monitoring?
2. Do you think the national food and nutrition policy is useful for the country?
3. Do you think the policy will bring out a positive change towards improvement in nutritional situation of the country?

GUIDELINE FOR CONSCIOUS BENEFICIARIES

1. How do you know that the food and nutrition policy will benefit your people?
2. Is there any adverse policy guidelines in the document, which will create problem to the benefit of the people?
3. In your opinion, is it necessary to involve the beneficiaries in policy formulation and implementation? Why?

Appendix-III: GUIDELINE FOR FOCUS GROUP DISCUSSIONS

1. What is the importance of national food and nutrition policy for the improvement of nutritional status of the population?
2. What are the strengths of national food and nutrition policy of Bangladesh? Could you please explain elaborately?
3. What are the weaknesses of the national food and nutrition policy? Please explain how these can be overcome?
4. What are the opportunities/scopes of the national food and nutrition policy? Please explain.
5. In your opinion, what are the possible threats of the national food and nutrition policy? Please explain how these threats may be turned to opportunities?
6. Is national food and nutrition policy suitably and effectively being implemented?
7. What are the barriers in implementation of the national food and nutrition policy?
8. What are the factors for successful implementation of the national food and nutrition policy?
9. Is there any gaps/lacking in the national food and nutrition policy, which needs to be incorporated?
10. Do you have suggestions to improve/update the national food and nutrition policy? Please explain.