THE NATIONAL FOOD AND NUTRITION STRATEGY
FOR ETHIOPIA

EXECUTIVE SUMMARY

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1. THE SIZE OF THE FOOD PROBLEM

1. 1986/87 is considered a good year for food production. Estimated total staple food production in 1986/87 (where enset, root crops and milk production have been estimated in cereal equivalents) was 7.7 million tons. However, after allowing for storage losses, estimated total food production plus imports was sufficient to provide a mean intake of 1766 calories per person per day only. This was 16 percent short of the 2100 calories which has been calculated as adequate by Ethiopian medical authorities and 23 percent short of national food self-sufficiency at the same standard of consumption. If one follows international procedures of adding ten percent to food supply to allow for the effect of unequal consumption of food between persons, then Ethiopia's food production in 1986/87 fell 30 percent short of national self-sufficiency.

2. With the poor kremt rains in parts of the country, performance in 1987/88 is likely to be lower, while the probable repetition within the next ten years of a major drought like 1973/74 and 1984/85 must be kept constantly in view.

3. The rate of growth of Ethiopia's population is currently 2.9 percent per annum and increasing, reaching 3.0 percent before the end of the Ten-year Perspective Plan (TYPP) period. National population is expected to increase from 46 million in 1987 to over 56 million by 1994.

4. While it is possible that there may be some minor under-counting of food sources, any comfort on this score is more than offset by (a) the impact of environmental degradation, which was estimated in 1985 to cause a loss of cereal output growing at
two percent per annum, and (b) losses in food processing and preparation not taken into account in the calculations in para 1 above.

5. The effects of aggregate food insecurity fall differentially on various groups of people. Statistical evidence indicates that at least 30 percent of preschool children in urban areas are affected by serious growth retardation as a result of poor health, in which poor nutrition plays an important contributory role. Fragmentary evidence suggests that a worse situation may prevail in the rural areas. Certainly, infant mortality rates are considerably higher in rural than in urban areas. Overall, 50 percent of all deaths in Ethiopia occur in children below the age of five.

6. The effect of crop failures over the six-year period 1981/82-1986/87 was that, on average, 3 million people in the rural areas each year were deemed to be in need of famine relief, with a peak of 8 million persons in 1985. The evidence of food deficit was particularly severe in three regions – Tigray, Wollo and Eritrea – where the proportion of the population in need of relief each year of the six year period averaged 32, 24 and 24 percent respectively. These regions, together with Hararge, Bale and parts of Gondar, show evidence of significant chronic food insecurity. At the other extreme, Gojam, Keffa, Wellega and Illubabor showed only infrequent signs of localised, transitory food insecurity. The four other regions (Sidamo, Gamu Gofa, Arsi and Shoa) occupied intermediate positions.

7. In order to achieve the TYPP’s target of a mean availability of 2000 calories per person per annum by 1993/94, total food production must increase by 6.5 percent per annum from the 1986/87 baseline level. If this trend rate is continued, 2100 calories can be achieved in 1995/96 and 2300 calories in 1998/99.
8. A trend rate of growth of 6.5 percent in food production over a decade or more has been achieved by very few countries. It must be sustained despite adverse production conditions in some years and in the face of unavoidable time lags in gearing up new projects and programmes. This compares with Ethiopia's experience over the period 1979/80 - 1985/86 when the rate of agricultural output growth was well below 0.5 percent per annum.

9. The peasant farm sector consists mainly of PAs at present but a rate of voluntary formation of PCs is anticipated such that they will be in the majority, by area and membership, by the end of the TYPP. The state farm sector produces 25 percent of the marketed cereal surplus, but only 4.0 percent of total agricultural production. The average cost of food production on state farms considerably exceeds the value of output, so that priority must be given to achieving greater efficiency at this stage. In consequence, to provide the food output required, the National Food and Nutrition Strategy (NFNS) must release the latent productivity of the dominant peasant sector through a wide range of appropriate planting materials, high yielding variety packages, additional land cultivated, an improved framework of incentives and greatly strengthened physical infrastructure, in particular.

10. All parts of the countryside, however, cannot be reached with similar effectiveness, while the output of some commodities is easier to expand than others. Thus, while major increases of cereals could be achieved by the intensification of inputs of the 'green revolution' type, an even larger area of cropped land could be reached, in a given time period, and calorie output per hectare transformed significantly to a greater degree, by the lateral transfer of suitable non-cereal energy crops, especially root crops such as potatoes, sweet potatoes, and bananas. Certain key projects, therefore, must be designed
and funded from the outset with a view to achieving direct impacts on food production at high speed and with comprehensive spread. Resources must be concentrated, therefore, on a few key public sector activities in each region which are capable of producing the desired impact.
2. MAJOR OBJECTIVES OF NATIONAL FOOD AND NUTRITION STRATEGY (NFNS)

11. The overall objective of the NFNS is to reach a position where access to food (including creating the ability to acquire it) for all Ethiopians is adequate at all times for an active and healthy life. In particular, it shall:

- Establish programmes to increase food supply and access such as pursuing research to increase crop yields, building cost-effective infrastructure for improved transportation and increasing incentives for farmers;
- Expand non-agricultural employment and income generating opportunities and use existing markets more appropriately;
- Establish programmes to alleviate current malnutrition by weaning food production and promotion, food and micronutrients supplementation, nutrition education, etc.;
- Maintain an effective national food security system.

12. The immediate scope of the NFNS, however, shall reflect national development capability. In nutritional terms, it shall aim to meet the minimum need of 2000 calories per person per day by the end of the TYPP. This is to avoid attempting to do too much too rapidly with limited resources. More ambitious nutritional targets could have been set but they would have entailed such large costs and reductions in resource efficiency as to make such a strategy non-feasible.

13. The following comprise the specific objectives of the NFNS:

- To provide a coordinated and rational policy framework as an essential basis for a concerted and successful attack on the complex problems of food insecurity, both chronic and
transitory, and inadequate nutrition which persist in threatening the population and economy of Ethiopia;

- To inform subsequent national, sectoral and zonal plan and project formulation activities, and the resulting implementation of projects and programmes, of the priority actions for which resource allocations, work plans and targets should be identified and set;

- To establish from an initial baseline a broad set of goals and problem-solving activities which can be subjected to a continuous process of monitoring, ongoing evaluation and periodic revision of the Strategy itself.

14. The resolution of the problems of national and household food insecurity and accompanying nutritional problems is seen as the key for unlocking the development potential of the economy. Rising agricultural surpluses and rural incomes will generate resources and effective demand leading to growth and diversification in other sectors of the economy.

15. In designing the strategy, account was taken to the following national development objectives and issues:

- The desirability, especially in the virtually inaccessible situation of the mass of the Ethiopian population, of achieving a position of long-run self-sufficiency in staple food supplies and reducing dependence on the generosity of the international donor community and/or on commercial food imports;

- The potential multiple contributions which significant and reliable marketed surpluses of food can make to national food security, to rural incomes and household food security,
to the size of the market for domestic manufactures, and to the foreign exchange balance;

- The fact that the majority of poorer groups lacking adequate entitlement to food are found on small farms or with small herds in the rural areas, especially in drought-prone zones, where productive land per family has been subdivided and degraded under the pressure of rapid rates of human and animal population growth;

- The fact that in addition, especially in periods of transitory food insecurity occasioned by crop failure in the major surplus producing areas, but to a lesser extent at all times, there is a significant group of poor families in urban areas whose real incomes (and the nutritional status of vulnerable family members) are highly sensitive to the prices of staple foodstuffs;

- That, nevertheless, there are major unexploited potentials for both food and other agricultural output increases and consequential income-generation which can be exploited by a well-designed set of technological, infrastructural and incentive-providing policies and projects;

- The fact that women play a particularly critical role in food production, reproduction of the future labour force and child care & rearing, while they bear the drudgery of performing the bulk of family life support tasks.
3. MAJOR PROPOSALS

3.1 FOOD PRODUCTION

16. The marketed surplus of foodstuffs, especially cereals, shall be rapidly expanded through the diffusion of high-yielding and quick maturing varieties; fertilizer and insecticides within the Peasant Agriculture Development Programme (PADEP) in selected high-potential areas. This will underpin the marketed surplus and therefore both the household food security of poor urban groups and, eventually, the national food security system itself in the shape of replenishment of the food security reserve.

17. At the same time, food production for consumption, in-village storage and sale shall be greatly expanded in current food-deficit areas by the lateral transfer through the PADEP of appropriate planting material, production techniques and improved farming systems. Agro-forestry (trees and shrubs for food, fodder and fuel within the cropping system) will be a key feature of this latter approach. In this way the household food security systems of at-risk rural households shall be strengthened.

18. The conservation-based development approach (simultaneously improving conservation and productivity, i.e. the intensification of farm production through the enhanced vegetative cover of crops, fodder and tree species in combination, shall be rapidly adopted in all agricultural production systems. Preventive conservation measures shall be applied in the high potential areas while in the heavily degraded areas reclamation-cum-productivity measures will be adopted. While encouraging farmers' initiative in such efforts, coordination at national level shall be strengthened also.
19. The farmers' role being so important in this farming system development approach to conservation, they shall be assured that the benefits accruing from these activities will benefit them directly and that, in the case of loss of access to resources, they will be assured of appropriate compensation or offsetting productivity increases on their remaining land.

20. In both food-deficit and food surplus areas, these approaches shall be further reinforced, whenever it is economically feasible or necessary, by livestock and fisheries development activities, micro-irrigation, strengthened physical infrastructure (roads, stores, markets, etc.), rural-to-rural migration or resettlement, afforestation and villagization in the context of land use planning and farming systems development.

21. Continued population growth in rural areas means that villagisation must be viewed as a continuing process of adjusting the growing rural labour force to land potential rather than as a one-off event. Low-cost voluntary assisted movement of people from old village to young village or new village site shall be encouraged in preference to fully planned and supervised resettlement schemes. New farmers will be encouraged to open up new farms in under-sized villages, to join new individual villages or to move to one of the frontier village zones which will open up new farmlands while making fullest use of social overhead capital. This will also reduce the rate of subdivision of holdings in old villages and encourage agro-forestry and other means of farming-systems intensification. To facilitate this process of voluntary assisted migration, the less restricted movement within the rural sector of people in search of work and/or prospective areas or settlement will have positive benefits.
22. Within the national villagization programme, the promotion of village gardens shall play a vital role in contributing to household food security. Also, the importance of flexibility in village layout, alternative structures and locations — taking into account the effect on the surrounding natural environment, accessibility to social amenities, as well as distance from the village to the farm site — shall be recognized.

23. Agricultural mechanization policy shall enhance intensive use of labour and animal draught power. Contour-planted agro-forestry and strip-cropping will require the use of appropriate tools which will help prevent land degradation.

24. The improved productivity and management of 'common resource' grazing and rangelands areas is seen as a major priority within the livestock sub-sector.

25. The Ministry of Agriculture shall improve and expand its extension service which will combine more effectively with applied and adaptive research. The extension service shall be strengthened with manpower, training and monitoring and evaluation procedures, coupled with adequate transport facilities and operating funds.

26. In order to support the National Food and Nutrition Strategy effectively, agricultural research shall focus on food production systems that will address both constraints and potentials. Taking the rural transformation trends in the country as a reference point, research shall shift from traditional concerns towards food production and agricultural development. In consequence, the following new or neglected areas of research shall be vigorously pursued:
- Development of conservation-based farming systems
- Land use planning including village settlement planning
- Food distribution and marketing studies
- Food storage & post-harvest technology
- Village gardens, horticultural development and processing of agricultural products
- Agro-forestry
- Micro-irrigation pilot projects
- Farm mechanization
- Farming systems research
- Rural socio-economic studies and agricultural policy and project analysis
- Rural sociology including home economics.

27. The importance of food for work (FFW) for various activities in the National Food and Nutrition Strategy is recognised, especially for farming systems-based conservation. Provision is requested from donor agencies for food for innovation-risk, food for agro-forestry, inputs for work, food for work in pastoral areas, and food for fishery production. Concerted and coordinated efforts shall be made to gain the maximum positive effects from food-aid and to minimize negative effects.

28. An Agricultural Development Strategy already exists within the current Ten-year Perspective and Three-year Development Plans. As the effective implementation of the NFNS is extremely important, consistency between the Strategies, and with other sub-sector policy documents, shall be achieved by the periodic revision of the Agricultural Development Strategy and its components in the annual and medium-term planning process.
3.2 PRODUCTION INCENTIVES AND MARKETING

29. In order to attain the objectives of the NFNS there must be a substantial increase in food production resulting in adequate marketed surpluses. The most important elements that contribute to an increase in agricultural production and marketed surplus constitute, among others, incentive prices, efficient marketing and distribution services, rural infrastructure, social services, consumer goods, the application of modern technology and improvements in the rural-urban terms of trade. A market structure where-in controlled prices and open market prices exist simultaneously would be desirable. While quota prices would be paid for pre-announced quota deliveries, premium prices (higher than quota prices) would have to be paid for above quota deliveries.

30. Due to the complexity of the problems involved in maintaining incentives in real terms for the consistent production of marketed food surpluses, there has to be an integrated approach to tackle them. The following measures shall be taken in the areas of prices and marketing in order to bring about an effective impact:

(i) It is important that farmers be provided with production incentives by a combination of raising output prices and/or subsidizing fertilizer prices in order to reach an incremental mean value cost ratio (VCR) of 2.0:1 or better. This shall apply to the five major cereals (teff, maize, wheat, barley, sorghum) with respect to nitrogen and phosphate fertilizers;

(ii) If the maintenance of a VCR of 2.0:1 should require a substantial (more than 10 percent) increase year on year in any of the cereal producer prices, then a subsidy shall be introduced temporarily restraining the
increase in the Kebele retail price for an identified target group comprising the poorest urban families. A study shall be made of the criteria for identifying target groups and administering the distribution of both ex-AMC subsidized food and ex-EFSR free or subsidized food in urban areas;

(iii) A request shall be made to international donors for production inputs, especially fertilizers and insecticides on grant terms or at concessionary prices. The prices delivered at the service cooperatives shall be standardised on a pan-territorial basis across the projected long-term import parity price levels over the three-year life of a National Crops Production Campaign. The subsidy shall be phased out over five years. Expanded credit arrangements for the purchase of inputs at controlled prices shall be made available to Service Cooperatives (SCs);

(iv) The average net cost of imported fertilizers will vary with both international prices and the terms and amounts of individual aid shipments. When the annual domestic fertilizer prices required to maintain VCRs of 2.0:1 are less than the ex post imported costs, the net realization shall be allocated to local currency counter-part funds in proportions predetermined by developmental priorities, and short-run contingency factors. Subject to detailed studies, two counter-part funds shall be established and placed under the control of the Ministry of Finance (MOF):
- A Staple Food Price Fund-in-Aid, which shall be used to offset the costs of temporary subsidies for low income urban consumers referred to in sub-para. (ii) above.

- A Regional Development Fund, which shall be used to subsidise specified labour-intensive rural infrastructure projects - micro-irrigation, rural transport, food stores, etc.

(v) There shall be a concerted programme to improve the regularity, range and price of consumer goods available to SCs, coupled with permitting small retail enterprises (village kiosks) to sell a specified range of basic and non-basic consumer goods, thereby providing access and distributional services to rural families;

(vi) AMC's global grain purchase quota shall be fixed within the limits of its optimal operational capacity. Local quotas shall not be fixed arbitrarily and will be maintained at a reasonable level until a substantial and sustained supply increase is achieved. Farmers shall be permitted to dispose of their produce on the open market after having fulfilled their quota obligations. The role of the AMC as a price stabilizing agency, in addition to its role as efficient trading organization, shall be reviewed and strengthened. When there is a market surplus the AMC shall act as a buyer of last resort to guarantee farmers a security floor price;

(vii) Studies shall be made of the feasibility of introducing effective seasonal and quality price differentials within the AMC system;
(viii) An efficiently operating private market shall be allowed and encouraged to operate alongside the AMC. To this end, measures shall be taken to ensure unrestricted inter- and intra-regional movement of grain and livestock. Ways of effectively integrating service and/or consumer cooperatives into the marketing system shall be studied and implemented;

(ix) There shall be no administrative actions restricting the activities of licensed private grain traders in all regions;

(x) Measures shall be taken to reduce the cost of agricultural storage and marketing by reducing the number of AMC’s grain collection centres, overhead costs, etc. AMC’s buying prices shall be raised to recompense Peasant Associations (PAs) for their increased costs of transport and handling.

31. Movements in the rural: urban terms of trade shall be monitored by the CSO. The policy intention is that any further improvements in or protection of rural incomes relative to urban incomes shall be secured in the context of falling real costs of staple foods in urban centres.

32. Greater use shall be made of inter-regional price information to encourage movement of foodstuffs from relative surplus to deficit areas. The media, especially radio, shall be used more intensively for this purpose.
3.3 FOOD PROCESSING AND RURAL INDUSTRIALIZATION

3.3.1 Food Processing

33. Food processing comprises two major categories, namely primary processing and secondary processing. Primary food processing accounts for the bulk of the food processing industry in Ethiopia.

34. Food processing has multiple objectives: food preservation; reduction of waste, bulkiness, cost of distribution and marketing; energy saving; improving palatability and nutritional availability. Additionally, it generates non-farm employment, adds value to agricultural exports and relieves women from the drudgery of manual labour in grinding and pounding. Government policy in the area of food processing shall be to:

- Expand grain milling capacities to meet the increasing consumption requirements in urban areas and institutional establishments;

- Encourage an increase in the number of appropriate technology mills in rural areas (such as wind and water-powered mills) to produce flours and expand the use of the composite flours;

- Organize agricultural production, marketing and sales operations of perishables;

- Encourage Research and Development on packing materials with the ultimate objective of replacing expensive imported ones;
Encourage cooperatives to establish dairies and animal fattening programmes to process and distribute milk, milk products, meat and live animals. Further, ways shall be found to accommodate small-scale private initiatives in this area to meet the needs of nearby towns and villages. This will serve to increase production and off-take and minimize processing and distribution costs and hence reduce rural consumer prices.

35. Livestock processing is an important instrument for the implementation of the national meat production programme. A range of applied policy studies in this area shall be initiated at an early date.

36. A study will be made of the case for establishing a centralized Research and Development Centre for the food processing sector (including packaging). One of the responsibilities of the Centre would be to advise the Government on the food laws and regulations. The Centre would also examine the processing and handling of traditional foods and be responsible for monitoring indices of techno-economic efficiency of the food industry.

37. Efforts to popularize processed food, with special emphasis on its contribution to household food security, shall be intensified.

3.3.2 Rural Industrialization

38. The development of small-scale industries in rural areas shall be promoted by "rurbanisation", improved industrial extension, support and training services, the provision of

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1Rurbanisation: the development of small service and trading centres in rural areas.
appropriate technology and credit, the development of links between small- and large-scale industries, the promotion of cooperatives and licensed private enterprises. Possibilities for such development include small-scale industries producing agricultural implements, construction materials, household equipment, processed foods, textiles, etc.

39. The experience of the Ministry of Agriculture's rural technology programme shows that the nucleus of urbanization is being created. To date, 120 farmers technical services centres have been established. Developing a network of rural centres and the diversification of agro-industries will be established as a continuous process with systematic planning, implementation and follow-up within regional planning procedures.

40. The setting up of agro-industries by farmers' cooperatives shall be legalized, encouraged and assisted.

41. The establishment of direct links (vertical integration) between established national industries such as oil and soap mills and textile factories and selected PAs and PCs shall be examined with a view to establishing several pilot projects. The industrial corporations shall be responsible for the organization of improved inputs, advice, production credit, collection transport, crop purchase finance, primary processing and manufacture.
3.4 RURAL ENERGY AND TRANSPORT

3.4.1 Rural Energy

42. The primary solution adopted regarding rural energy has been afforestation of eroded slopes with fuelwood species and planting fuelwood in blocks. Although the overall impact of the programme has been judged to be beneficial, some questions have been raised regarding aspects of the programme, particularly the opportunity cost of land when it could be used for sustainable grazing and crop growing. Rural fuelwood supply must be integrated within wider land use, village and farming systems planning approaches.

43. The thrust of the rural energy supply policy shall be one based on appropriate energy mix. Presently more than half of the rural energy requirement is derived from wood. The remainder is obtained from other biomass sources, i.e. animal waste, crop residues, etc. A phased and parallel approach shall aim at an efficient utilization and expansion of wood resources by means of improved and new technologies and the adoption of promotional policies.

44. Regarding the efficient utilization of fuelwood, the objective shall be to reduce the per capita annual requirement from the present average of one cubic metre. The widespread adoption of improved stoves could reduce fuelwood requirements by about one-half of cubic metre per capita per annum.

45. The other component of the rural energy supply mix is loose biomass, i.e. crop residues and animal waste. Widespread utilization of this source of energy shall be promoted by introducing and widely diffusing bio-gas and packed stoves.
technologies. The approach up to now has been to demonstrate that biogas works, but future emphasis will be on a clear programme to achieve widespread adoption.

46. The use of modern energy forms such as electricity and petroleum products in rural areas has massive foreign exchange implications and the issue must be generally approached with due regard to the needs of the community, resource availability and cost-effectiveness of the various energy supply options.

47. At present, steps are being taken within the Ministries of Agriculture, Education, Mines and Energy, etc. to address the issue of wood-economizing technology. However, financial resources allocated to these efforts are fragmented and far too small compared to the magnitude of the task. In addition, the absence of an organization responsible for the mass distribution and effective dissemination of these and other appropriate rural technologies has been a major problem. On the other hand, the success of afforestation and agro-forestry development is dependent upon the clarification of policy with regard to ownership of and use-right to trees and forest resources.

48. To achieve effective forest protection and development, measures shall be taken, including long-term area commissioning or leasing, which will guarantee legal use entitlement to relevant institutions. Furthermore, where peasant families and others have exclusive rights of use to a piece of land or to a productive tree or plant, they shall have the right of use to the produce of the land, i.e. to plant and harvest trees and plants as best fits their farm/household economy.

49. In future, greater weight shall be given to the integration of rural needs for fuelwood within a wider framework of multi-purpose land use and farming systems development. This is subject only to the creation of capacity within Government.
Afforestation development must be balanced against rural communities' needs for grazing and cropped land. Equating fuelwood areas with eroded or erodible steep slopes should not be automatic, as there are alternative uses which may be more beneficial both to the community and to the environment.

3.4.2 Rural Transport

50. Ethiopia has one of the lowest road densities in the world. The techniques followed in road building are at present largely capital-intensive. Labour-intensive techniques can and shall help build more rural access roads with greater benefit to rural families and marketed surpluses.

51. The bulk of rural produce is moved from farms to local markets on foot and animal trails. The NFNS shall urgently draw up an extensive programme to upgrade these trails to accommodate animal-drawn carts and wagons in parallel with the national programme for rural road construction.

52. Subsidies shall be given to the PAs to enable them to acquire simple earth-moving equipment, tools, carts, wheels, etc. These could further be used for the maintenance of the rural roads and expansion of other rural infrastructure.

53. Thus, rural road projects shall be programmed in such a way as to transfer knowhow in road construction and maintenance to the rural communities.

54. Priority in road construction shall be given to roads up to RR 10 standards using labour-intensive techniques (such as the FFW programmes). Wherever practicable, road improvements shall be achieved by upgrading the most affected sections of roads to make them accessible throughout the year. Improved saddles and harnesses shall be promoted to increase the
load-carrying capacity of equines. Constructing stores/shelters at nodal points linking feeder roads would further complement the development of more "modern" road networks.

55. Other measures include hiring traditional transport services by Service Cooperatives; upgrading the skills of traditional blacksmiths, leather workers and carpenters in the manufacture and repair of animal-drawn carts and other traditional or intermediate transport technology; and expanding the supply of parts and raw materials for the manufacture of carts and other components of the road transport system.

56. An integrated approach shall be used in the future design of rural transport projects. Infrastructure, means of carriage, construction and maintenance, financing, tariffs, etc. shall all be taken into account in systems design.
3.5 FOOD SECURITY, NUTRITION, HEALTH AND POPULATION

3.5.1 The Food Security System

57. The National Food Security System aims at building national capability or preparedness to cope with serious shortfalls in food production. The components of the national food security system include the emergency food security reserve, grain storage capacity, early warning system, strategic seed reserves and drought relief and recovery programmes.

(i) The Emergency Food Security Reserve (EFSR)

The average number of people each year who were in need of relief during the period 1981-87 is estimated at 4.6 million, some 10 percent of the total population of the country. The present EFSR should be increased to a level which would cover the needs of 10 percent of the total population of the country for a period of 120 days at a per capita daily ration of 400 grams of cereals. On the basis of the present estimated population of 46 million people, this would represent some 220,000 metric tons (MT) of grain. Since commercial food importation has a shorter lead time than food aid, the Government shall earmark foreign exchange reserves sufficient to import 40,000 MT of grain as a component of the target EFSR. This will leave a gap to be filled of 134,000 MT (180,000 MT less 46,000 MT currently in the EFSR). The present EFSR is only for free distribution to rural beneficiaries. Poor urban residents may also suffer from extreme food shortages and high rates of nutritional deficiency during times of crisis. Although urban food needs are
the responsibility of the AMC, there appears to be a good case that the EFSR should also be made available for free distribution to targeted low-income urban beneficiaries during official food emergencies.

Strict rules of operation have been defined for the reserve, a key element being that an official Government emergency declaration is needed before free distribution may take place. To strengthen these procedures, a set of criteria shall be determined defining 'need' for emergency food and what constitutes a state of food emergency. When there is evidence that these criteria are being met, the timely declaration of an emergency will be greatly facilitated. Care shall be taken by all agencies concerned with food transport and storage to avoid duplicate freight movements of foodstuffs, as these could represent a heavy burden in the wasteful use of foreign exchange.

Grain Storage Capacity

Storage facilities are generally inadequate at household, PA, woreda and regional levels. Adequate storage at these levels would reduce the need for large centralized stores and would also be considerably cheaper. There is also a need to minimize the practice of excessive food consumption in festivities and sale of too much grain (in addition to AMC quota deliveries) at cheaper prices after harvesting only to buy it back later at higher prices or suffer from the consequences of food insufficiency. Therefore, in addition to improvements in storage facilities and greater availability of short-term credit, simple techniques of "food budgeting" shall be provided to rural families.
(iii) The Early Warning System (EWS)

The EWS has reported very regularly and in detail on rainfall, prices, crop conditions and impending and current food shortages. However, more attention shall be given to the use of EWS data at the regional and district levels and to the promotion of local level action. The EWS must not end with the production of periodic reports at the national level; there should be regular feedback to local levels. The fuller use of data by decision-makers at all levels will be ensured e.g. by appreciation and training courses. These shall precede the wider array of data becoming available under the more comprehensive Food Information System (FIS).

(iv) Strategic Seed Reserve

The Ethiopian Seed Corporation in consultation with the Plant Genetic Resources Centre has developed a strategy for seed distribution during or after emergencies, based on stocks of seed of proven local varieties. Seed reserves shall be upgraded with emphasis on crop research on local varieties, extension services and improved seed distribution.

(v) Relief and Post-Drought Recovery Programmes

These will continue to be provided as need indicates. Recovery programmes shall emphasise more accurate targeting of supplementary feeding, treatment of malnourished children and high-productivity employment on-farm and in infrastructural investment using food-for-work.
3.5.2 Nutrition Policies and Programmes

58. The National Food and Nutrition Strategy aims to improve food availability to households but it should also be seen as a basis for providing adequate nutrition and health which constitute basic human rights. Therefore, nutrition is a major objective of the Strategy in its own right. Additionally, adequate nutrition and health will help improve productivity and further the other major objective of this Strategy, i.e. to increase food production. Improved availability of food alone will not be sufficient however, to eliminate nutritional deficiency as it has a number of linked causes, the most important of which are inadequate access to food and high prevalence of infectious diseases. Supporting actions needed in the health sector are discussed in the next sub-section. Also, measures to raise the status of women in society can be expected to have benefits in terms of the improved nutritional status of vulnerable groups.

59. In addition, the NFNS shall assist in alleviating nutritional problems in a number of more direct ways. These include:

- Monitoring and promotion of child growth;
- Protection and promotion of breastfeeding;
- Production and promotion of weaning food;
- Supplementation of food and micro-nutrients;
- Nutritional education;
- Nutritional surveillance.

60. The poorest urban consumers are vulnerable to fluctuations in the prices of staple foods. Where a significant kebele consumer price increase has been imposed in order to maintain food producers' incentives (see section 3.2 above), as support for this would not be available from the EFSR under
current procedures, a targeted food subsidy for the poorest urban groups shall be made available until the real price of food has returned to its previous level.

3.5.3 Health

61. Particularly relevant to the NFNS, because of their strong interactions with nutrient utilization, nutritional status, food 'need' and availability of energy for (agricultural) work, are the following activities in the health sector:

- Control of infectious diseases, particularly diarrhoeal diseases and acute respiratory infections, and immunization (especially against measles);
- Maternal and Child Health (MCH) and Family Planning (FP) activities;
- Increased access to safe water supply and improvements in environmental sanitation.

62. To attain these objectives, implementation of the Primary Health Care (PHC) programme, a proper two-way referral system health service backup and a continuous supervisory mechanism shall receive higher priority and material support. A health information system, logistics support, and management capability at all levels (and particularly at the woreda (district) level) are the critical elements which must be strengthened for the effective planning, implementation, monitoring and evaluation of the PHC programme.

3.5.4 Population Problems and Measures

63. The estimated current growth rate of the national population of 2.9 percent per annum will result in an increase from 46.0 million people in 1987 to 56.4 million in 1994. While this increase of over 10 million has significant implications for
increased agricultural production, it pales into insignificance against the increases required over the twenty years following 1994. The results of projections based on the current growth rate and various assumptions about future fertility cause most serious concern.

64. Unfortunately, the potential for growth is massive. Even if fertility declines rapidly, the population will increase by 50 percent over the next 15 years, and by more than 90 percent over the next 30 years to reach 81 million. With no fertility decline, population will grow by almost 60 percent by the year 2000 and increase to 114 million in 30 years, more than two and a half times its present size. This implies that investments in education, health, employment, etc. will have to double by the year 2010 to maintain existing standards. Population-carrying capacities of certain areas of the highlands have already been exceeded (especially in the Low Potential Cereal (LPC) zone). While land carrying capacities can be increased by improved technology, improved cropping patterns, irrigation, etc., the processes have been slow. The result is that over much of the LPC zone carrying capacities are falling. Such continued rapid population growth threatens to undermine development efforts and has forced the Government to compromise its aspirations to provide universal education, health care, food security and other basic needs.

65. For these reasons, an appropriate population policy, including effective measures to secure a significant decline in fertility, shall be adopted as a matter of very high priority. This shall strengthen Government efforts to address population problems through accelerated social and economic development, rising literacy levels, resettlement and villagization programmes. The following measures shall be undertaken immediately while awaiting the results of a more detailed and comprehensive population policy analysis.
- Strengthening and expanding health services, including community health services with emphasis on MCH and extended availability of family planning advice and services;
- Wider use of mass organizations, the mass media and school curricula for information and education on population problems, and to acquaint young people with sex education, including the hazards of abortion and the superiority of preventing conception, improved quality of life in smaller families, etc.
- Institutional capacity building for the organization of research and statistics, with regard to the numerous complex facets of population problems, to form a stronger empirical basis for population policy;
- Strengthening women's organizations and expanding their programmes in order to create conditions to resolve problems connected with social inequalities, thereby (i) creating favourable conditions for women's personal development; (ii) providing incentives for the fuller accomplishment of their functions and roles in society and (iii) increasing women's role in the promotion of female education, especially on population issues including family planning.
66. The sensitivity of the performance of the national economy to major shortfalls and stagnation in the agricultural sector is very apparent from the relevant macro-economic data. Some of the problems in the balance of payments area are externally induced, especially the adverse trend in the international terms of trade associated with the high levels of energy prices and the ability of the industrialised countries to export their imported inflation through higher prices for manufactures. The general solution to the current economic malaise is seen to lie in a combination of exploiting the potential for rapid technological supply shifts in small-scale agriculture - with staple food production to the fore - coupled with a greater emphasis on coopertivization, incentive pricing and greater market efficiency, leading to progressive improvements in the rural: urban terms of trade, together with complementary deployment of other macro-policy instruments, especially the exchange rate, taxation reforms, planning processes and the improved intersectoral allocation of budgetary resources.

67. From the perspectives of both the national economy and the NFNS, expanding export earnings are required both to finance the needed farm production inputs and to ensure that increasing consumer goods output from domestic industry supports the rural: urban terms of trade. In the area of fiscal policy, measures shall be taken to unify the large variety of taxes and levies which may be collected from rural producers and to minimize the uncertainty attaching to them.

68. In the area of economic planning procedures, a stronger focus shall be given to employment generation objectives and to the more rigorous appraisal of new and ongoing projects and programmes utilising this and other developmental evaluative criteria. A strong case is recognized for strengthening the
annual budget allocation to the peasant agriculture sector; in particular it is necessary to increase the non-salary proportion of the recurrent expenditure of the Ministry of Agriculture so that field staff can become more operationally effective.
3.7 IMPLEMENTATION OF THE NATIONAL FOOD AND NUTRITION STRATEGY (NFNS)

3.7.1 Links to National Decision Making

69. The Council of Ministers shall be responsible for the overall direction of the NFNS and will have a crucial role in ensuring the harmonious integration of a wide range of activities of Government institutions as well as of multilateral and bilateral donors and NGOs.

70. A highly-placed policy Committee shall advise the Council of Ministers on NFNS matters. This Committee will have the following tasks:

- Oversight of the integrated planning, monitoring and evaluation of the core aspects of the NFNS: food production-cum-conservation, prices and marketing, rural energy, nutrition, food security and food processing;

- Commissioning further technical and economic policy or project analyses on any aspect of the NFNS, or of relevance to it;

- Advising the Council of Ministers of key areas of policy or organization where changes or innovations are required in pursuit of the objectives of the NFNS.

71. The NFNS Committee shall be serviced by a full-time secretariat ('the unit') with adequate technical, analytical and administrative capability for the required tasks - food and nutrition policy analyses: multi-period, annual, rural regional and project planning; monitoring and evaluation procedures, etc. The NFNS secretariat shall be located in the ONCCP on the following grounds:
The multi-disciplinary nature of the NFNS means that a single sector agency will find it difficult to give due weight to the legitimate concerns and activities of other sectors;

The effectiveness of the NFNS depends on its integration with a range of planning mechanisms and decisions which are the province, as far as coordination and overall formulation are concerned, of the ONCCP;

The statistical and zonal planning functions which come under ONCCP's overall responsibility have direct and important roles to play in the implementation of the NFNS;

The ONCCP has accepted initiating responsibility for this area and has brought both phases to date - the Alemaya University Workshop on National Food Strategies and the Final Draft of the NFNS document - to completion on the due dates.

The NFNS Committee may wish to set up technical sub-committees to assist it in its work. Amongst others, the following areas are likely to need attention:

- Food production systems
- Food production inputs
- Market related factors
- Nutritional and health aspects
- Formulation of policies and plans.
3.7.2 External Assistance

73. The NFNS is an integrated multisectoral programme which requires donor assistance in various key areas; in particular, the Emergency Food Security Reserve, the PADEPs, micro-irrigation and other key food production projects and programmes.

74. In addition, however, a technical assistance project is also required in order to:

- Strengthen the capacity of the ONCCP, and in particular the NFNS Unit in ONCCP, to coordinate the Strategy, to monitor and evaluate its progress and to synthesize and analyse information for policy analysis;

- Strengthen the capacity of other relevant public institutions for food and nutrition policy analysis;

- Identify information needs, sponsor studies, facilitate collaboration and exchange of information and increase awareness of the NFNS;

- Monitor and evaluate progress of the NFNS;

- Organize workshops at different levels on relevant issues.

3.7.3 Information Requirements

75. The successful implementation and monitoring of the NFNS will need an effective and integrated information system with a two-way flow of information from the lowest to the highest levels and effective interchange of information between all Government agencies involved. Micro- and mini-computers will be used increasingly for effective data processing, storage and retrieval.
76. The information requirements for the NFNS focus on longer-term trends and developments. At the same time, there are important data requirements for forecasting and monitoring short-term prospects, especially concerning the day-to-day developments of crop production, weather and food supply conditions.

77. Monitoring of major developments will cover all relevant aspects of crop and livestock production, land use, price trends, marketing, nutritional and health status, climatic and population trends.

78. Monitoring and evaluation of programmes and projects will cover area-based rural development programmes, irrigation projects, nutrition interventions, family planning campaigns, etc.

79. Monitoring and analysis of the NFNS will focus on developments of major indicators such as the structural deficit, self-sufficiency, impact on food insecurity and the contribution of the NFNS to development objectives.

80. Institutional responsibilities for data collection, analyses and dissemination in various fields have been assigned to 10 Ministries and other Government institutions, i.e. CSO, MOA, MSFD, MDT, MFT, MOH, ENI, RRC, NMSA and ONCCP.
4. OFFICIAL DEVELOPMENT ASSISTANCE FLOWS

81. Ethiopia's very low rates of domestic savings and investment suggest that it will be difficult to raise and maintain agricultural growth at levels significantly above the population growth rate of 2.9 percent per annum without substantial and sustained Official Development Assistance (ODA). The basic issues for improving ODA flows to Ethiopia concern: (i) "production-based food security" designed to bring about longer-term improvements in agricultural productivity, and (ii) "Defensive food security" directly related to relief.

82. Ethiopia is one of the least-aided countries in the world as is shown by the following 1984 figures for per capita ODA (est. from IBRD, World Development Report, 1987):

<table>
<thead>
<tr>
<th>Country</th>
<th>ODA (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan average</td>
<td>18</td>
</tr>
<tr>
<td>Somalia</td>
<td>70</td>
</tr>
<tr>
<td>Sudan</td>
<td>29</td>
</tr>
<tr>
<td>Botswana</td>
<td>96</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>9</td>
</tr>
</tbody>
</table>

83. Although the major reason for reduced aid flows to Ethiopia is political, other policy issues such as resettlement, prices and marketing are also regarded as constraints. Capital and food aid, however, remain indispensable for economic recovery, for relief programmes and for a whole range of rehabilitation and famine-prevention projects (food production, rural infrastructure, etc.). Amongst the measures to be taken to improve the level of aid flows are increased openness in development discussions with donors and a variety of formal and informal consultative group meetings, workshops, etc.
84. Donor response to the 1984/85 crisis was substantial as the following table shows:

<table>
<thead>
<tr>
<th></th>
<th>1984/85</th>
<th>1985/86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Aid</td>
<td>1.105 million MT</td>
<td>0.781 million MT</td>
</tr>
<tr>
<td>Non-Food Aid</td>
<td>$ 608.6 million</td>
<td>$ 200.1 million</td>
</tr>
</tbody>
</table>

In addition to the above, the contribution of NGOs is estimated at $500 million for the two-year period.

85. Today, any significant aberration in rainfall patterns can place 10-15 percent of the population immediately at risk of starvation. While the country's medium-term structural food deficit is currently estimated at 500,000 tons of grain per annum, an in-country food security reserve is required of 220,000 MT. Less the 40,000 MT covered by currency reserves and 46,000 MT currently in store, a gap remains of 134,000 MT. Government is making major efforts to reduce and eliminate this deficit; donors will be requested to give further support.
5. FOLLOW-UP ACTIVITIES

86. There is only one thing worse than a poorly-designed national food strategy. That is a good strategy which is ignored in subsequent decisions and actions. Consequently, it is essential to plan and begin to implement a sequence of measures as soon as the final version of the National Food and Nutrition Strategy becomes available after approval at the highest levels of State.

87. The Strategy lays out a set of guidelines for the interacting plans and activities of the key executive agencies of Government. These guidelines will also inform the donor community about the Government's intentions. The Strategy's guidelines are to be observed over an indefinite period until there is sufficient feedback from implementation or new and unforeseen developments that the guidelines need to be revised. If they are to be observed, the guidelines must be known and understood by all decision-makers and advisers in the key agencies. The first activities to take place subsequent to the approval of the final version of the NFNS, therefore, shall be a series of 'teach-ins' on both the overall content and the most relevant specific sections for the senior staff of the key Government agencies. Also, press releases and programmes for the various media and audiences, national and international, shall be prepared and disseminated.

88. The main vehicles for translating high-level policy decisions into public sector actions on the ground are the medium-term plans (currently, the Three-year Plan and, in prospect, the Five-year Plan) and the annual budgetary process. The priorities of the NFNS shall be translated into sectoral projects, programmes, capital and recurrent financial allocations and trained manpower allocations.
89. Although socio-economic planning in Ethiopia is based on the principles of democratic centralism, the current practice tends to be more centralized than the socioeconomic conditions permit. By relying excessively on central initiatives and top-down decisions and procedures, it does not capture the more detailed, accurate, numerous and geographically dispersed ideas, preferences and actions of rural field workers and the rural people themselves. The attainment of the desired agricultural production increases, especially those needed from semi-subsistence agriculture, therefore requires a strong participatory mode of planning, implementation and evaluation consistent with the principles of democratic centralism. This can best be achieved by utilising and strengthening the capacity of the Zonal and Regional Planning offices to produce regional development plans which incorporate the problem identifications and solutions from lower levels and the specific local actions required. Regional Development Plans incorporating at least the relevant agricultural and rural development aspects, therefore, shall be prepared in time to provide a middle-up component of the Five-year Development Plan, to be meshed with sectoral activities within an internally consistent national planning framework.

90. At the same time, it is important that the most urgent food-related actions identified throughout this document are not delayed by the medium-term planning process. These shall proceed, therefore, as soon as approval has been given to the Strategy and resources have been received or earmarked in the annual budget.

91. The NFNS itself shall be subjected to monitoring and evaluation (M and E) so that effective implementation can be assured and weaknesses or new improvements rapidly detected and changes made accordingly. For this to happen in an effective manner, the key component activities must be subject to the same procedures; this includes not only capital investment projects or donor-funded activities but also a range of ongoing programmes.
such as agricultural research, farmers training, maternal and child health, etc. The mid-plan evaluation of the overall national Food and Nutrition Strategy by mid-1991 (end 1983 J.C.) shall be based on a comprehensive evaluation exercise which will both draw on M and E information about components and evaluate the higher-level Strategy framework itself.