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## COUNTRY STRATEGY OUTLINES

Agenda item 6

### BHUTAN - CSO

#### ABSTRACT

Bhutan is a least developed country (the per caput GNP for 1992 was 180 dollars), with significant and indeed growing levels of national and household food insecurity. While firmly preserving its Mahayana Buddhist culture and traditional authority structure, and while seeking to protect itself against the disruptive impact of modernization, the monarchy equally firmly pursues a path of balanced economic growth with a strong emphasis on social values (health and education) and protection of the environment. Maintaining the agricultural population on their land and preventing - or at least reducing - migration to towns, are among the Government's highest priorities; a sustainable increase in the agricultural productivity of small subsistence farmers is considered to be the most effective and direct way to achieve these objectives.

Under the conditions prevailing in Bhutan the two key factors in raising the productivity of subsistence farmers are i) universal primary education; and ii) the opening up of rural communication. WFP is currently active in both areas. This CSO recommends continuing along these lines, with a narrower targeting in the former and a move from national highways to community feeder roads in the latter area.

The Government gives high priority to continued WFP assistance to the two sectors, and it has the full support of the donor community. Sustained food aid to primary boarding-schools in particular is, in the short term, clearly essential for the maintenance of the educational system. On the other hand, the dependence of the Government on WFP support to meet recurrent costs in the education and road sectors is a cause for concern for both WFP and the Government. It has therefore been agreed that during the CSO period, which harmonizes with the national Eighth Five-Year Plan period, the Government and WFP will jointly study the various alternatives for reducing the Government's dependence on external assistance for the recurrent cost funding in view of an early phasing out of WFP assistance.

All monetary values are expressed in United States dollars.

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## Note to the Executive Board

**This document is submitted for contains recommendations for review and comments by the Executive Board.**

Pursuant to the decisions taken on the methods of work by the Executive Board at its First Regular Session, the documentation prepared by the Secretariat for the Board has been kept brief and decision-oriented. The meetings of the Executive Board are to be conducted in a business-like manner, with increased dialogue and exchanges between delegations and the Secretariat. Efforts to promote these guiding principles will continue to be pursued by the Secretariat.

The Secretariat therefore invites members of the Board who may have questions of a technical nature with regard to this document, to contact the WFP staff member(s) listed below, preferably well in advance of the Board's meeting. This procedure is designed to facilitate the Board's consideration of the document in the plenary.

The WFP focal points for this document are:

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Should you have any questions regarding matters of dispatch of documentation for the Executive Board, please contact the Documents Clerk (tel.: 5228-2641).

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## FOOD INSECURITY AND POVERTY

### National food insecurity

1. Bhutan is faced with a growing national food deficit. In 1992, the agricultural sector contributed 42 percent to the GNP and employed 92 percent of the labour force, but was unable to meet the country's food requirements. Subsistence farming accounts for the bulk of food produced and consumed. Out of 16 percent of arable land, only eight percent is currently under cultivation; this could be expanded marginally but only by bringing highly fragile, low-yielding land into production and risking environmental damage in the long run. Land holdings are often fragmented into three to five parcels at various distances from the homestead. Labour productivity is low as a result of crop losses to pests and wild animals, steep slopes, thin soils, long distances and slash-and-burn cultivation. Relatively low yields and small land holdings in comparison to household sizes do not allow for significant marketable surpluses. In 1994-96, grains from domestic production were close to 60 percent of domestic requirements. Table 1 in Annex II reports the estimates of caloric intake for 1994 and the per capita production of major cereals by districts (Dzongkhags). These figures document the existence of insufficient domestic cereal supplies. Furthermore, the liberalization of agricultural trade in India - which brought the prices of most agricultural commodities closer to world prices - has increased the cost of cereal import. In 1994 the Government moved from a goal of food self-sufficiency to one of food self-reliance, relying on the export of high value horticultural crops (fruits, vegetables, spices, etc.) to pay for food imports. A goal of 70 percent self-sufficiency in key grains was set. Unless Bhutan's export base grows, the risk of national food insecurity is high because of inherent severe constraints in meeting domestic food needs from national production.
2. A growing dependency on food imports is an indication of a growing national food insecurity. Bhutan imports over half of its marketed food grains. Cereal imports have grown from an average of 10,000 tons in the early eighties to between 30,000 and 40,000 tons in the nineties. The figure in Annex I indicates the cereal import position of Bhutan (in rice and wheat) and the portion of imports (currently only rice) provided by WFP. In the post-1987 period imports by WFP appear to be marginal. Their possible disincentive effect on the national food production appears nil. Landlocked and bordered by India and China (Tibet), Bhutan depends almost exclusively on India (over 65 percent) as a trading partner. Imports from India come from that country's public foodgrain distribution system (PFDS). Although Bhutan has faced price increases of 73 percent and 91 percent for rice and wheat imports respectively between 1991 and 1995 (as India has reduced subsidies on its foodgrains), Bhutan has a protected quota for key foodstuffs from India and can purchase through the Food Corporation of Bhutan (FCB) for WFP at prices still below those on the world market.
3. Yet another indication of Bhutan's current national food insecurity is the acceleration of population growth. It has risen in the last two decades from an annual increase of 1.7 percent to reach one of 3.1 percent. Population increase exceeds growth in domestic production of basic foodstuffs. Domestic food production is difficult to assess



confidently. By all indications it has increased more slowly than elsewhere in Asia.<sup>1</sup>

## Household food security

4. The levels, prevalence and frequency of individual food insecurity were estimated in 1993-94 by a Royal Government of Bhutan/FAO joint study. This exercise resulted in a Comprehensive Food Security Programme (FAO, 1994) that determined which gewogs (administrative blocks) in each of the country's 20 districts were food-insecure. The study concluded that food insecurity existed in 108 of the 162 gewogs surveyed, and was most prevalent in nine districts (see map in Annex III).<sup>2</sup> With nearly 38 percent of children under five still exhibiting mild to severe malnutrition, households spread across the country experience malnutrition. Using other parameters, it is judged that nearly one third of Bhutan's population, now estimated at over 600,000,<sup>3</sup> may be considered as affected by chronic food insecurity. Approximately half of this number (roughly 17 percent of Bhutanese households), for at least a substantial part of each year, experience acute food insecurity, consuming significantly less than the minimum recommended daily caloric-intake.
  
5. Food insecurity exists for numerous families throughout the country, especially the landless who seek low-paid unskilled labour. Household food insecurity occurs more among families in the Eastern region, which contains only 19 percent of the total wetland agricultural area and supports around 40 percent of the population. For virtually all rural populace, however, there is a "lean" season. Generally, from March to July food supplies for subsistence farmers are short. This period, prior to the country's major harvests, affects households country-wide and is currently intractable because of the wide dispersion of the population and high transportation barriers blocking rural improvement. During the lean season households employ a number of coping mechanisms to survive. These include an extended family social security system, seasonal labour (e.g., as road workers), small-scale income-generating activities (e.g., weaving) and the ability to live off roots and tubers gathered from the forests. Other coping mechanisms exist, such as

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<sup>1</sup> The most generous estimate of growth in cereal production is 2.9 percent. This estimate rests on a "measured" total cereal production of 124,000 tons in 1983 (World Bank, 1994) and the Ministry of Agriculture's (MOA) 1994 estimate of 182,000 tons (Royal Government of Bhutan, 1995). Problems arise in using statistics in Bhutan, a point noted by many donors. In agriculture, figures for production from MOA vary dramatically from those supplied by the Central Statistical Office (CSO), as well as being inconsistent over time. In 1994, for example, the CSO reported potato production at 22,000 tons while the MOA figure was 104,000 tons (data supplied by MOA, 25 April 1996).

<sup>2</sup> The 1994 FAO study identified nine districts [Dzongkhags] as highly food-insecure, using results from 18 of the 20 districts. This rating relied on judgements by experienced observers during two workshops using a rating of 1 to 3, in which a 1 was assigned to a food-secure block, a 2 to one with some insecurity and a 3 to a block with high food insecurity; the nine highest scoring districts were subsequently identified as having high levels of food insecurity. The study also reported that food insecurity is spread widely, although it becomes more acute on a seasonal basis and in certain more remote gewogs.

<sup>3</sup> When Bhutan joined the United Nations in the seventies, it estimated its population at one million. As recently as 1993 the World Bank and United Nations agencies used a population estimate of 1.8 million. The current figure accepted by the Government of Bhutan and UNDP is 600,000. The World Bank's figure for 1994 is 646,000. Numbers for the portion of the population lacking adequate nutrition have never been established precisely; the figure used is drawn from various estimates from different regions and studies (Government of Bhutan, 1989; Tsering, 1993; FAO, 1994; WFP, 1994).



drawing on storage of food and cash reserves, but these are available to only a few better-off families.

6. An estimate of average household income spent on food is 60 percent (based on nutritional surveys and extrapolating from levels in India and Nepal of 52 percent and 57 percent respectively; World Bank, 1995). In the nine Dzongkhags highlighted as especially food-insecure, donors (e.g., WFP, UNCDF and IFAD) are making efforts to target interventions. These areas, with especially hilly terrain, have populations that are widely scattered on small, low-yielding plots of land. A study carried out by the International Food Policy Research Institute (IFPRI) on the effects of geographic factors on malnutrition concluded that world malnutrition in children is highest in South Asia, especially in Bhutan and nearby areas, because of population growth and "mountainous topography that severely constrains cultivation".
7. Bhutan's food insecurity is also linked closely with its level of literacy and the country's steep, rugged terrain which has been an impediment to communication and exchange and has restrained economic growth. The population is thinly dispersed over a large area, thereby making it costly for the Government to provide schooling facilities in each village/settlement. In view of the vital catalytic role played by education in improving conditions, particularly in rural areas, the Government has established boarding-schools in such areas to provide education, and seeks food assistance to meet part of the high cost of running and maintaining them. Education addresses two major, longer-term constraints of Bhutan in overcoming food insecurity: population growth and lack of knowledge and skills of the rural poor. This applies in particular to women: education is an important factor in lowering birth rates; and providing education and skills to women should have a positive impact on overall food production and nutrition. The lack of roads makes marketing of products extremely difficult. Income-generating opportunities for the rural poor, both in agriculture and handicraft industries, have been handicapped by the lack of adequate communications. Marketing margins range from 20 to 300 percent, depending on the weight/value of a commodity. External trade is also depressed because of the high costs between farm gate or industry to point of export. The segmented markets across the country, and the disarticulated nature of the economic links, are a principal reflection of the mountainous topography. Roads are the only feasible solution to enhance an integrated national economy and to improve the country's food security.



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## **GOVERNMENT POLICIES AND PRIORITIES IN ADDRESSING POVERTY AND FOOD INSECURITY**

### **Background and development philosophy**

8. The goal of sustainable development of human and natural resources in Bhutan has encouraged donors to give a favourable review of government policies (see the resource flows by donors over the last decade, Table 2, Annex II). The Government has sought to create broad-based improvements (through broad policies rather than specific interventions). In the period 1984-94 life expectancy increased from 46 to 66 years. Sharp reductions were recorded in infant, child and maternal mortality rates. Significant increases were realized in the percentage of both urban and rural households with access to safe water-supplies and sanitation. Universal child immunization has virtually been achieved and some diseases, such as leprosy, have been almost eradicated. Health coverage and education are free and all other development services are provided to the people on a highly subsidized basis.

### **Macro-economic and development policies**

9. Since the last five-year plan the Government has implemented policies of gradually privatizing public-held corporations, such as the FCB, and sought to maintain firm budgetary constraint on fiscal spending. Much of the Government's capital budget is financed by foreign assistance, more often as grants. Even its recurrent budget of approximately 60 million dollars has donor assistance. Although most donors target capital budget expenditures, approximately 15 to 17 percent of annual recurrent costs are supported by assistance, about half of which comes from WFP's contribution. One result of limited government revenues has been a substantial growth of the private sector, which has increasingly taken over import and marketing functions. Another result has been the reduction of subsidies. In recognition of the goal of making the recurrent cost of public goods and services such as schools and roads self-sustainable by the Government, donor aid for recurrent costs is expected to be phased out and efforts to develop new revenue-generating mechanisms are under consideration. Developing revenue to cover recurrent costs is clearly an important issue to be faced before the Government begins a Ninth Five-Year Plan. This need only increases with the elimination - as of early 1996 - of the obligatory household labour contribution (Goongda Woola - a public income resource not normally recorded, (World Bank, 1994)). Public financing will be especially important for areas such as health and education, which accounted for 25 percent of the Government's 1995-96 recurrent budget, an impressively high figure among developing countries (IMF, 1995).
10. With the growth in manufacturing and hydro-electric power generation, agriculture and forestry production has declined from 57 percent of GDP in 1980 to about 40 percent in the mid-nineties. These three areas remain the largest sources of foreign exchange and are critical to meeting the country's import bill which exceeded exports by 26 million dollars in 1994-95 (IMF, 1995,). India is the dominant trading partner, as well as the largest contributor of economic assistance to Bhutan. In particular, it is the largest buyer of Bhutan's growing hydro-electric production, as well as the largest supplier of food.



11. Servicing the country's foreign debt will require only about 15 percent of export earnings, a low figure among developing countries. Because its average economic growth in recent years has been above five percent, outpacing population growth, Bhutan has achieved substantial per capita gains. These have not come from agriculture, the sector that remains the largest source of employment. This sector is estimated to engage over 92 percent of the work force. The urban population, approximately 20 percent of the total population, has generally fared better than the rural. The Government has a goal of providing universal free health and education accessible to all families. In spite of impressive strides since 1961, over half the population lives more than half a day's walk from the nearest motor road, and life for the majority of the rural populace is one of vulnerability, insecurity and incessant toil. Government policy, even more aggressively in the Eighth Five-Year Plan (1997-98 to 2001-2), is to slow down unsustainable migration from rural to urban areas.<sup>1</sup> Agriculture and rural life opportunities are included in the education curriculum; donors urge greater attention to these issues (Royal Government of Bhutan, 1991; UNDP, 1995). Rural/urban terms of trade have also been shifted by government policy; among these is the effort to make imported rice available at a relatively low price throughout the country. In spite of such measures, migration from rural to urban areas remains a major feature of the Bhutanese economy.
12. Bhutan has received much of its assistance over the last 10 years in the form of grants, or subsidies of various kinds. External assistance has grown from 25 million dollars in 1985 to 78 million dollars in 1995, 18 million dollars of which came from the United Nations system. Within United Nations aid, nearly 25 percent was from WFP. Table 2 in Annex II reviews the total aid flows to Bhutan over the last decade. Over the programming period 1997-2001 UNDP expects to provide about 25 million dollars in core and trust funds to Bhutan; UNICEF has a planned outlay of 14.1 million dollars for the same period. Over the same period WFP assistance is envisaged at 12 million dollars as discussed subsequently under the section "WFP's Role in Bhutan".

## Food security and poverty policies

13. With respect to food assistance in particular, the Government believes, and the development community in Bhutan shares this view, that sector- and regionally-targeted food aid can be a powerful resource. In the framework of current self-reliant policies, it can help Bhutan to meet one of its most urgent challenges: guiding the rapid process of transition of the rural population from the current highly traditional and isolated state to modernity in ways that enable poor people to remain on their land, thereby minimizing the already alarming trend of migration to towns. Improving the living conditions of the rural poor is the essence of this task.
14. The Government's food security policy aims to import foodstuffs using export earnings from cash crops. UNDP is committed to assisting the Government's strategy of

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<sup>1</sup> The official government figure is 15 percent urban, 85 percent rural. However, population estimates place the capital, Thimphu, at close to 40,000 and growing at 10 percent a year; in addition there are at least a dozen other urban centres of consequence, hence the estimate of 20 percent. There is a strong desire among schoolchildren to migrate to urban areas with their increased accessibility to electricity, clean water, health and education. Urban crowding of small valley cities poses a substantial future problem in Bhutan (with its official population of about 600,000). In its recent policy review, UNDP concluded that rapid urbanization and limited urban employment opportunities for school leavers present a structural challenge to Bhutan.



food self-reliance through expanded export of higher-value crops, especially "horticulture" crops. This strategy reflects constraints on arable agricultural land (described earlier). The country is, however, resplendent with forests; the King has designated 60 percent of the land, largely mountainous forests and woodlands, as protected for environmental preservation. This policy is in sharp contrast to that of neighbouring countries, whose forests are rapidly being depleted in order to achieve quick earnings. By forgoing such a rapid means of acquiring export earnings, Bhutan is widely commended. Implementing this policy inevitably requires discipline and self-sacrifice by portions of the population who are often quite poor.<sup>1</sup>

15. The Government has assigned the FCB major tasks in alleviating food security, such as supplying food throughout Bhutan (using nationwide pricing strategies for essential commodities). This has become more expensive because, as mentioned, rice and wheat flour prices rise along with Indian prices. The FCB also carries out government policies supportive of food security by purchasing local food products for domestic redistribution and for export (thus aiding small farmers). Further, it has a mandate to stabilize national food prices, better assuring people's access to food. Thus in several venues, the FCB is a positive component in government policies directed at reducing food insecurity.
16. Food security is intimately linked with health. Access to health has been expanded rapidly in the last decades, together with education, as major social services. Continuation of free medical services is likely to place a growing burden on the Government. Nevertheless, at the moment, the spread of rural basic health units, outreach clinics, village health workers - in addition to the expansion and maintenance of district hospitals and regional health centres - is impressive. Thanks to improved health conditions between 1984 and 1994 under-five child mortality declined from 158 per thousand live births to 96.

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<sup>1</sup> It is worth underlining that Bhutan's commitment to the protection of natural resources contributes positively to global goals on this issue. The Dutch Government's recent 10-year commitment to reciprocal efforts for environmental improvements signifies this recognition of global responsibility for cost-sharing of collective environmental developments. UNDP's Programme Note for its commitment to Bhutan for 1997-2001 takes a similar cognizance of the scope for aid targeted on the development of human and natural resources, which is particularly possible and appropriate in Bhutan.





## Gender bias

17. There is no gender discrimination in Bhutan. The law of inheritance reserves equal rights for all, regardless of sex and age. In agriculture, with the rural population almost entirely dependent on subsistence farming, there is no distinct division of roles between men and women. As agricultural labour they are paid equal wages. Marketing is mostly done by women, and this has further helped their advancement. In Bhutan the entire household sits down together for meals and shares the same together. Women represent 16 percent of the civil service. Their low representation is due to the fact that in the initial years after Bhutan ended its isolation in the sixties there were no educational facilities available in the country and only boys were sent out to India for education. While in the higher positions the number of women is gradually increasing, there is a noticeable increase in recent years in the lower and middle grades. It should be noted that in many areas Bhutan has a matrilineal, matrilineal society, with women inheriting land and wealth and men moving to live with their in-laws.
18. All schools in Bhutan are co-educational. The gender gap in education is narrowing. In 1995 girls represented 43 percent of total enrolment at the primary level, 43 percent at the junior secondary level (grades 7 and 8) and 34 percent at the senior secondary level (grades 9 and 10), compared with 41 percent, 33 percent and 26 percent in 1991. As regards retention, there are virtually no differences: in 1995, the overall drop-out rate between pre-primary class and grade 10 was 4.3 percent for girls and 4.2 percent for boys. The academic performance of girls has traditionally been better than that of boys (the overall repetition rate, pre-primary and grade 10, in 1995 was 15.1 percent for girls and 15.9 percent for boys; in 1993 the figures were 18.3 percent for girls and 19.7 percent for boys). Nevertheless, there is still a need for efforts to increase further the participation of girls in education, particularly at the post-primary level. This includes social mobilization, provision of adequate separate boarding facilities for girls and making available more schools that are closer to children's homes.

## Institutional capacity

19. The Government is giving high priority over the next five years to the development of human resources. Fortunately, in Bhutan, even though capacity is limited by the modest number of well-trained government civil servants, the capacity to implement projects well, and without corruption, compares most favourably with other countries. Thus the implementing agencies currently (and prospectively) display the capacity to carry out efficiently the common objectives of the Government and WFP. The comparatively high efficiency and reliability of the Government in implementing WFP assistance reduces the need for targeting food insecurity interventions through local NGOs. This possibility would in any case not (yet) exist to any substantial degree in Bhutan. With only two recognized voluntary associations/groups to act as intermediaries, Bhutan, in this respect, is not a typical food aid recipient.



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## ASSESSMENT OF WFP'S PERFORMANCE TO DATE

### Overview

20. Since 1975, WFP has assisted Bhutan with development projects totalling 48.9 million dollars. WFP assistance to Bhutan began with a school feeding project and has expanded since then to span areas such as health, agriculture, price stabilization, communications (construction and maintenance of roads, mule tracks and suspension bridges) and resettlement schemes. Table 3 in Annex II provides an overview of WFP assistance to the country since 1975. Long-term alleviation of food insecurity using food assistance has been a principal aim. The use of food aid in Bhutan in the education and communications sectors has been evaluated as being especially successful.
21. The Ministry of Finance is the focal point for all assistance. Within the Ministry, the National Budget and Aid Coordination Division (NBACD) is the agency responsible for coordinating the implementation of WFP-assisted projects. The various line ministries take responsibility for individual project execution. Capacities in ministries are thin; as a result, capacity-building has been a priority in the design of WFP projects in the past and in targeting sectors in which to use food resources.
22. Since the mid-eighties, when the emphasis shifted to local purchases, the FCB has been the sole local supplier of commodities to WFP. This system has worked well and has proven to reduce costs to WFP and facilitate logistics; for instance, the previous need for transport from the port in Calcutta to the border point in Puntsholing was obviated. WFP resources are saved because locally-purchased commodities tend to be significantly cheaper than internationally-supplied ones. Deliveries are now more timely and post-c.i.f. losses are reduced.

### Completed activities

#### *Resettlement*

23. From 1980 to 1986, WFP provided assistance for the resettlement of landless settlers in five districts in Central and Southern Bhutan. Some 1,000 families received food rations during the initial period of their resettlement (year 1: for 365 days; year 2: for 250 days; year 3: for 180 days) to carry them through until such a time as they would be able to live on their own agricultural production. Total WFP support to this activity totalled 710,000 dollars.

#### *Agriculture/buffer stock*

24. In the agriculture sector the largest WFP assistance has been supplied to forestry in conjunction with a World Bank-supported project for activities such as afforestation, reforestation, road construction and nurseries. Food rations proved a useful supplement in attracting and retaining labourers. Two other projects assisted in this sector were dairy development and construction of irrigation schemes - the latter within the framework of a UNCDF-funded irrigation programme in which food rations were distributed as part-payment of wages to workers. Under the dairy development project, WFP-supplied milk



powder and butter oil were reconstituted to provide better quality pasteurized milk to consumers in Phunthsoling and Thimphu. The funds generated were utilized to benefit a large number of farmers through improved productivity of livestock, increased production of forage and strengthening of institutional capacity. The recently completed project with food assistance in the agriculture sector was for the creation of a buffer stock designed to achieve market price stabilization in cereals. In 1990, WFP provided FCB with food commodities worth 760,000 dollars. The commodity stock was also for use by the Government in case of any emergency. Few emergencies have occurred since then, all affecting small localities, and they were handled by the Government without drawing upon WFP or other donor assistance. The generated funds are held in an interest-earning cash bank account while awaiting an expansion of more dispersed FCB storage facilities to hold the physical stock. The total value of support to the agriculture sector has been 3.65 million dollars.

## Ongoing activities

### *Health*

25. WFP assistance to the health sector, begun in 1977, focused mostly on encouraging mothers and pre-schoolchildren to visit mother and child health (MCH) centres, Basic Health Units (BHUs) and outreach clinics, and providing budgetary support to the Government for feeding of hospital patients. In 1988, WFP support to health and education was merged into one project and subsequently expanded to a second phase. The work of UNICEF and WFP in past years in helping establish BHUs and assisting in major inoculation campaigns is credited with helping significantly in the decline of health-related malnutrition. Progress in the health sector has indeed been impressive and immunization coverage currently stands at 80 percent. At the same time, the population has come to value health services to the extent that food rations as an incentive are no longer needed. WFP support to BHUs and outreach clinics was therefore terminated at the end of 1994. WFP assistance in support of hospital feeding is scheduled to phase out in December 1998; the Government will be expected to cover this small recurrent health expenditure.

### *Road maintenance and feeder road construction*

26. Roads in Bhutan were virtually non-existent until the sixties. Since then, some 2,100 km of paved roads have been built with support from a variety of sources, including WFP. To assist the construction and maintenance of transportation networks, WFP has supplied food since 1985 as partial wages for workers in the Public Works Department (PWD - National Work Force), Roads Division of the Ministry of Communication. The recipients have been the workers and their families who receive monthly food rations at subsidized rates. The 5,000-person National Work Force road workers are among the poorest of the population and are usually landless. The funds generated are ploughed back into the project, mainly to improve the living and working conditions of workers through the provision of simple housing and work safety equipment. The current project ends in December 1997.
27. In support of the ongoing road construction project, an ad hoc study financed from the Dutch Quality Improvement Grant was undertaken in 1993-94 to provide technical training to national staff concerned with road construction to adopt planned maintenance



and a programme of rehabilitation using appropriate stabilization techniques. The study assessed 140 instabilities on two highways, established protective measures and stabilized 20 of them with bioengineering and small-scale engineering methods. Over 50 civil engineers, foresters and geologists were trained in stabilizing works and bioengineering methods. The findings of the study indicate that the stabilizing designs adopted on the roads will reduce the expenses for maintenance and emergency works. An evaluation mission conducted by WFP, FAO and ILO in June 1995 concluded that the strategy of roadside stabilization yielded significant savings, as high as 6.5 percent of the planned outlays.

### *Education*

28. WFP support to the education sector began in 1975, covering a little more than 1,000 students in nine schools scattered throughout the country. It was subsequently expanded to eventually cover almost all types of schools, from primary to post-secondary, and the large majority of students. The present project (Bhutan 3734 (Exp.1)) will terminate in December 1998. WFP assistance to education throughout 1995 totalled 24.6 million dollars.
29. WFP food aid is widely credited with having helped to establish education in the country and achieve the rapid expansion of the system (between 1961 and 1995 the total number of schools went from 59 to 288; enrolment increased from only 1,500 to 77,276; the primary gross enrolment ratio is currently estimated at about 70 percent). At present, boarding facilities are an indispensable part of Bhutan's educational system, given the dispersed nature of settlements and the often long distances between children's homes and the schools.
30. WFP and the Government have been conscious from the start of the danger of creating dependency on the part of the Government and parents. For this reason, several steps were taken over the years to target food aid more specifically to those students who needed it most. In 1991, for example, school feeding was terminated for all day students at junior high and high schools as well as at primary schools in urban areas. The last evaluation mission in 1994 recommended that food assistance be restricted to those day schools that are inaccessible to motor transport and are in food-insecure and low-enrolment areas. The recommendation has been implemented. Primary education boarders continue to receive WFP food; this is particularly focused on ensuring that poorer students do not drop out.<sup>1</sup> According to budget figures supplied by the Division of Education, the value of annual WFP supplies in 1996 represents 48 percent of the total recurrent costs to primary boarders. These figures clearly demonstrate the importance of WFP support to primary boarding students.

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<sup>1</sup> Contrary to secondary and post-secondary schools, the Government does not pay for feeding of boarders at primary schools. All feeding costs in addition to WFP support are therefore borne by parents.



## WFP'S FUTURE ROLE IN BHUTAN - 1997-2001

31. Based on Bhutan's continuing food insecure status, its favourable policy environment and assessment of past performance, WFP food assistance should continue through the period of the Eighth Five-Year Plan, extending six months beyond the period of the CSO (1997-2001). Total WFP funding for 25,000 tons of food would amount to about 12 million dollars. This amount includes about 7,500 tons, worth three million dollars, which is already committed under the ongoing WFP programme.
32. In order to achieve development objectives through the use of food aid, the Government proposes three priority objectives for WFP assistance. In general WFP concurs that these are uses in which food can most effectively support:
- a) primary education;
  - b) community feeder roads; and
  - c) agricultural development.

### Primary education

33. In the view of the Government and also of the international community, WFP assistance to this sector continues to have the highest priority. WFP assistance currently funds approximately 48 percent of the total recurrent costs<sup>1</sup> of primary boarders and it is virtually impossible for the Government to find, during the next five years, resources sufficient to replace such a large recurrent cost component without seriously affecting the quality of the primary school system. The only expenditure items that could possibly provide for adequate savings would be that of teachers' salaries, but to be of any significance, reductions here would probably have to cover the entire teaching staff of the country, which would have a damaging effect on the quality of the system.<sup>2</sup>
34. The only other alternative for funding school meals would be to recover the cost from parents. However, here again, there is currently little room for manoeuvre: parents' contributions to the cost of boarding vary today between five and 10 dollars a year, and even these modest contributions are often difficult to recover. School fees for two meals a day (about 37 dollars per student per year, based on the current local value of the commodities supplied by WFP) would be outside the reach of a large majority of parents. Boarding-schools would have to all but close.

<sup>1</sup> The total recurrent costs for primary boarding students in 1996 were calculated on the basis of the annual value of WFP support to primary boarders in 1996, plus the recurrent government education budget for 1995-96, prorated according to the percentage of boarders in total primary and secondary enrolment (based on 1995 enrolment figures).

<sup>2</sup> It should be mentioned that the Bhutanese Government has traditionally been careful to ensure education of high quality, as expressed, for example, in the good level of teachers' salaries (a primary teacher earns on average 79 dollars a month), the state of school facilities, and the quality and availability of teaching aids.



35. The continued assurance by WFP of the boarding-school food component beyond the completion of the current project phase, i.e., for the period 1999 to 2001, is essential for the implementation of the Eighth Five-Year Plan. This means in effect a further expansion of project 3734 for at least three years, although in the targeting of food assistance priority may then be given to boarding-schools in food-insecure regions or districts.
36. Concerning feeding in day-schools, the need is evidently less concrete and the priority claim on future WFP resourcing is less predictable. The case for support is now clearly weakened: the willingness of parents to seek schooling for their children has increased and many schools are overcrowded. Therefore, the day-school feeding component can, at the end of the current phase of project 3734, i.e., with the beginning of the school year 1999/2000, be phased out. Nor should WFP press for inclusion of community day-schools<sup>1</sup> in the programme.
37. On the other hand, WFP should not limit itself to providing food to schools, but should use its influence to promote their effectiveness as agents for agricultural change. In particular, WFP should assist the Government, through the provision of non-food items or through cooperation with other donors, in further intensifying the agricultural component of the primary school curriculum. If the main outcome of rural primary schooling is to improve the living conditions of the rural poor, in particular their productivity and food security, then there is scope for concerted efforts in making the agricultural curriculum as responsive to local needs as possible. Two possibilities are school gardens and school ties to extension/research. First indications are that several donors are interested in providing technical assistance for teaching using existing school gardens as demonstration farms (Voluntary Service Overseas (VSO) offered volunteers; IFAD might support the involvement of research extension workers in school-based education/research).
38. Obviously, dependence on outside aid is an issue of concern to WFP, but equally so to the Government. During the period of the Eighth Five-Year Plan, efforts must be made to reduce the number of boarding-schools, or at least curb their further growth in favour of day-schools to the extent possible (for current projections see table 4 in Annex II). However, given the conditions in rural Bhutan, boarding-schools will for the foreseeable future remain an essential component of the system. Therefore, the Government will (during the Eighth Five-Year Plan) identify and earmark potential new sources of revenue (possibly from newly installed electrical power plants), for the gradual assumption of the boarding-school feeding costs after the year 2001. At the same time, the potential of mobilizing a higher cost contribution from parents will also be examined. It is proposed that towards the middle of the Eighth Five-Year Plan period the Government carry out a study - in consultation with and co-funded by WFP - of various alternatives for reducing the Government's dependency on external assistance for recurrent cost funding and on the phasing out of WFP assistance. Among the issues to explore in this connection would also be the potential for greater use of locally-grown food (e.g., maize and potatoes) rather than imported rice.

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<sup>1</sup> These are small, often one-teacher schools built by the communities and are located close to children's homes. They usually cover only the lower primary grades and act as feeder schools to the nearest full primary school.



## Community feeder roads

39. Rural Bhutan is characterized by an extreme isolation of individual families, and any economic or social progress will require a quantum leap in improved communication. Food security in particular will depend not only on increased subsistence production, but also on the marketing of at least some of this production. For the large majority of Bhutanese farmers, the marketing of even the smallest quantity of their surplus will require new links of communication: a foot path, a mule track, or a feeder road.
40. There is also an urgent need for forest roads. While the overall surface of natural forest in Bhutan is still large, the ecological risk of deforestation, mainly through uncontrolled firewood collection and inadvertent fires, accelerated by a growing population, is also large. Among the consequences that preoccupy the Government most is the erosion in the command areas of potential future hydro-electric installations. Meeting these risks will require systematic forest management, including the controlled use of forests for firewood and other forest products, which, however, requires forest roads for access, particularly in an environment such as Bhutan, where control of these roads would be assured.
41. Given the importance of rural roads, WFP concurs with the Government that highest priority - after education - should be attached to WFP assistance to this sector. This emphasis is shared by the donor community. In fact, there are currently at least three donors (Government of Germany, UNCDF and IFAD) who have rural road programmes under preparation for which they would highly welcome, and in some cases depend upon, WFP support for funding the unskilled labour component. The thrust of their programme is on Eastern Bhutan, where most of the food-insecure districts are located. For WFP, this would open a window of opportunity for joint programming with other donors and to target its assistance to the food-insecure eastern region of the country. With technical competence they would identify, design and implement the road-building projects and would assume full responsibility for their technical, social and environmental soundness, while WFP could concentrate on the most effective ways of funding that part of the labour component that would not be provided through voluntary participation by the villagers themselves. The volume of WFP food required for these schemes would not exceed that of the current project 2117 which will terminate by the end of 1997. Therefore, the ongoing phase of this project should be followed by a further expansion of up to a similar length, aimed primarily at community road construction. Both the Government and the WFP country office should examine, in consultation with the above donors, the possibility of including some community forest roads already in the ongoing project. On the other hand, a limited and time-based continuation of WFP assistance to some components of the current highway maintenance programme under project 2117 should at this stage not be excluded.

## Agriculture

42. As a third priority, the Government requested food aid for the support of a variety of small agricultural development schemes, including reforestation and the construction or rehabilitation of small-scale irrigation on farmers' own lands. Primary boarding-schools and community feeder roads are likely to absorb the bulk of whatever resources WFP will be able to allocate to Bhutan. If additional resources become available, these will be allocated in support of agricultural development schemes.



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## CONCLUSION, KEY ISSUES AND RISKS

43. Bhutan will, for the foreseeable future, remain in the group of both least developed (LDC) and low-income, food deficit (LIFD) countries. Food aid will remain a highly valued development resource. The proposed strategy allows for targeting of food assistance to food-insecure districts or regions of the country. Deliveries, particularly when using local purchases, will continue to be cost-efficient.
44. There is the risk that the Government may be unable to mobilize additional internal revenues to assume the recurrent costs of primary boarding-schools and to allocate funds for opening of new day-schools. The expansion phase of the road construction project envisages close collaboration with other donors who may not all be ready to start their projects simultaneously. This may necessitate revision in the scope and timing of the expansion phase. The major risk, however, is that as the rationale for continuing food aid declines, proper preparations to adjust to this reality may not be made. While a case exists for the recommended levels of food aid - as discussed in this CSO - for the 1997-2001 period, food assistance beyond this time should necessarily not be assumed. Further economic progress of Bhutan, coupled with the diseconomies of scale for WFP in providing food assistance, make the phased and well-planned withdrawal of food aid quite important. Indeed this direction is in accord with the Government's own policies of increasing self-reliant and environmentally-friendly development. Continuing dialogue with the Government on maintaining a time horizon for phasing out WFP assistance will therefore be important.





**ANNEX I**



## ANNEX II

Table 1

<b>AREA AND PRODUCTION OF RICE AND MAIZE BY DZONGKHAG (1994)</b>
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	Gewogs	Population	Rice per-capita	Maize per-capita	Daily caloric intake in food-insecure Dzongkhags
		Total	(Kilograms)		
WEST:Thimpu	10	44 225	76.5	1.1	
Paro	10	17 926	317.5	7.0	
Haa	5	7 773	30.2	24.7	
Chukka	11	54 870	69.3	28.3	
Samchi	16	71 030	94.7	78.1	
WEST CENTRAL: Gasa	4	2 755	15.2	0.6	1 701
Punakha	10	14 835	2 961.5	6.7	
Wangdue Phodrang	15	22 345	427.3	5.9	
Dagana	11	19 180	231.7	416.6	2 191
Tsirang	12	17 990	172.1	225.5	
EAST CENTRAL: Bumthang	4	11 607	0.0	1.5	
Trongsa	5	14 252	255.4	58.2	2 309
Shemgang	7	16 415	162.7	204.6	
Sarpang	15	36 307	155.8	193.9	
EAST: Luntshi	8	17 095	189.4	130.1	1 909
Trashigang	8	19 140	75.1	167.5	1 646
Mongar	11	37 962	120.4	169.1	2 228
Trashigang	15	63 472	70.0	201.1	
Pema Gatshel	8	18 471	3.9	146.6	1 647
Samdrup Jogkhar	10	39 540	100.5	170.7	1 712
<b>Total</b>	<b>195</b>	<b>547 190</b>			



Table 2

<b>Summary of external assistance (in thousand dollar)</b>							
<b>Agency/Country</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
<b>Multilateral:</b>							
UN System	10 899	10 603	15 022	19 065	21 311	22 835	17 741
Non-United Nations system	8 255	10 035	16 579	7 359	4 522	4 563	7 258
Bilateral	5 369	4 304	12 725	16 586	9 353	22 509	52 990
NGOs	694	989	1 081	1 584	4 186	4 783	6 285
<b>Total</b>	<b>25 187</b>	<b>28 931</b>	<b>45 407</b>	<b>44 594</b>	<b>39 372</b>	<b>54 690</b>	<b>84 274</b>
<b>United Nations system</b>							
ESCAP	-	-	-	-	-	-	5
FAO	187	824	894	541	287	576	394
IDA	-	-	-	-	2 850	1 970	148
IFAD	590	70	1 810	490	50	119	33
ILO	-	-	-	-	5	1	-
IMF	-	-	-	-	100	177	321
ITU	-	-	-	-	6	11	24
UNCDF	1 500	2 255	698	602	2 572	336	1 013
UNCHS	-	-	-	55	50	-	-
UNDP	5 766	4 972	4 511	7 602	7 712	9 887	6 593
UNESCO	128	260	531	81	5	5	-
UNFPA	160	27	52	142	162	537	134
UNICEF	622	479	1 917	3 880	2 123	4 235	4 031
UNIDO	-	-	-	106	11	-	107
UNIFEM	-	-	-	-	-	-	-
UNV	-	-	-	128	155	188	168
UPU	-	-	-	-	-	4	1
WFP	1 377	1 377	3 412	4 620	4 616	4 039	4 205
WHO	569	339	1 167	818	607	750	564
<b>Subtotal</b>	<b>10 899</b>	<b>10 603</b>	<b>15 022</b>	<b>19 065</b>	<b>21 311</b>	<b>22 835</b>	<b>17 741</b>



### Summary of external assistance (in thousand dollars)

Agency/Country	1985	1986	1987	1988	1989	1990	1991	1992
<b>Non-United Nations</b>								
AFESD	3 790	8 520	6 690	2 820	710	-	-	-
AsDB	2 235	2 515	3 930	2 550	3 812	4 100	5 420	-
EC	750	750	549	-	-	463	1 838	-
World Bank	1 450	1 250	5 410	1 560	-	-	-	-
Other	-	-	-	429	-	-	-	-
<b>Subtotal</b>	<b>8 225</b>	<b>13 035</b>	<b>16 579</b>	<b>7 359</b>	<b>4 522</b>	<b>4 563</b>	<b>7 258</b>	<b>1 115</b>
<b>Bilateral Donors</b>								
Australia	133	176	42	19	399	925	570	-
Austria	-	-	16	164	-	1 130	-	-
Belgium	-	-	-	-	-	-	52	-
Canada	145	212	362	-	149	170	436	-
Denmark	800	1 100	475	1 050	808	2 673	2 728	-
Finland	-	-	-	-	18	-	-	-
France	-	-	-	-	-	-	-	-
Germany	282	-	294	-	600	1 870	1 838	-
India	-	-	-	-	-	-	17 705	-
Ireland	-	-	38	51	-	-	76	-
Italy	-	-	50	64	50	-	39	-
Japan	145	145	6 356	7 875	1 967	12 580	14 115	-



Summary of external assistance (in thousand dollars)								
Agency/Country	1985	1986	1987	1988	1989	1990	1991	1992
Netherlands	-	-	-	-	809	390	1 977	
Norway	-	-	2 860	24	1 334	397	8 920	
New Zealand	-	-	-	13	165	67	78	
Republic of Korea	-	-	-	-	-	206	232	
Singapore	-	-	-	-	-	-	-	
Sweden	-	-	-	-	32	491	66	
Switzerland	3 597	2 400	1 962	6 870	2 448	367	2 485	
Thailand	-	-	-	-	-	-	10	
United Kingdom	267	271	270	456	574	1 243	1 663	
<b>Subtotal</b>	<b>5 369</b>	<b>4 304</b>	<b>12 725</b>	<b>16 586</b>	<b>9 353</b>	<b>22 509</b>	<b>52 990</b>	

Agency/Country	1985	1986	1987	1988	1989	1990	1991	1992
Netherlands	-	-	-	-	809	390	1 977	
Norway	-	-	2 860	24	1 334	397	8 920	
New Zealand	-	-	-	13	165	67	78	
Republic of Korea	-	-	-	-	-	206	232	
Singapore	-	-	-	-	-	-	-	
Sweden	-	-	-	-	32	491	66	
Switzerland	3 597	2 400	1 962	6 870	2 448	367	2 485	
Thailand	-	-	-	-	-	-	10	
United Kingdom	267	271	270	456	574	1 243	1 663	
<b>Subtotal</b>	<b>5 369</b>	<b>4 304</b>	<b>12 725</b>	<b>16 586</b>	<b>9 353</b>	<b>22 509</b>	<b>52 990</b>	



Table 3

<b>WFP ASSISTANCE TO BHUTAN: COMPLETED PROJECTS</b>			
Project	Title	Duration of project (years)	Total WFP
			Cost in (million dollars)
2143	Improvement of nutrition in primary schools	4	1.09
2115	Feeding of infants, expectant and nursing mothers and hospital in-patients	10	1.74
2405	Food assistance to settlers in the southern districts	6	0.71
2117	Construction and upgrading of roads, mule tracks and suspension bridges.	4	2.82
2143 (Exp.1)	Food assistance to educational development	6	6.01
2559	Irrigation development in Southern Bhutan	4	0.06
2560	Development of forestry in Bhutan	5	0.89
2117 (Exp.1)	Construction of roads	6	4.52
2143 (Exp.2)	Food assistance to educational development	3	6.65
2115 (Exp.1)	Feeding of infants, expectant and nursing mothers and hospital in-patients	3	1.25
2560 (Exp.1)	Development of forestry in Bhutan	6	1.72
3734	Assistance to primary and post-primary students and vulnerable groups	4	8.85
3578	Establishment of national buffer stock	5	0.76
TOTAL			37.08
ONGOING PROJECTS.			
PROJECT No.			
2117 (Exp.2)	Construction and maintenance of roads	5	7.92
3394	Dairy development	6	0.22
3734 (Exp.1)	Assistance to primary and post-primary students and hospital patients	4	3.70
TOTAL			11.84
<b>GRAND TOTAL</b>			<b>48.91</b>

Source:

- a) WFP Progress Report 1995 (N° 181, 28th February 1996)
- b) FCB/Foreign Trade Statistics, 1992/Bhutan Trade Statistics 1993 and 1994
- c) Bhutan Annual Development Assistance Report 1982, 1984, 1985-1986
- d) UNDP Development Cooperation Report 1987, 1988, 1989, 1990, 1991, 1992 and 1993.



Table 4

<b>Primary education: Project growth of total enrolment and of the number of boarding students; 1995 - 2002</b>
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Year	Total enrolment	Boarders Scenario A	Boarders Scenario B
1995	65 000	9 300	9 300
1996	68 000	9 800	9 800
1997	72 000	10 300	10 000
1998	75 000	10 800	10 200
1999	79 000	11 300	10 300
2000	83 000	11 900	10 000
2001	87 000	12 500	9 600
2002	92 000	13 000	9 200

Notes:

Figures for 1995 are drawn from the 1995 General Statistics published by the Division of Education.

Enrolment growth was projected at five percent per year, in line with government estimates used in preparing the Eighth Five-Year Plan.

Scenario A for boarders assumes that the percentage of boarders in total primary enrolment will remain at the same level as in 1995 (14.3 percent).

Scenario B for boarders assumes that the percentage of boarders in total primary enrolment will gradually decrease as follows as a consequence of relevant government interventions:

1995: 14.3 percent	1999: 13 percent
1996: 14.3 percent	2000: 12 percent
1997: 14.0 percent	2001: 11 percent
1998: 13.5 percent	2002: 10 percent



**ANNEX III**





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