RELEVANCE AND POTENTIAL OF EMPLOYMENT-INTENSIVE WORKS PROGRAMMES IN THE REINTEGRATION OF DEMOBILIZED COMBATANTS

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Foreword

The rise in the number and scale of armed conflicts in recent years has increased the demands on the United Nations and international development agencies for assistance in humanitarian relief and peacekeeping efforts. The major challenge facing conflict-affected countries lies in peace-building through sustainable development which goes beyond emergency relief and peacekeeping. This involves re-integrating a large number of demobilized combatants, displaced population and refugees into normal civilian life, reviving the economy and generating new bases for secure employment and incomes for the affected population, and re-building social and political structures.

The employment-intensive works programmes constitute a potent strategy for addressing the multiple demands in a post-conflict environment: direct and large scale job creation, thus providing income benefits to refugees, displaced populations and demobilized combatants within a very short period of time helping stimulate market demand for other goods and services; rehabilitation and construction of physical infrastructure which are essential in reviving social and economic activities and improving living conditions, especially in rural areas; direct creation of physical assets which enhance productive capacities and employment generation in the long term; development of private sector and small contractors; and local and national capacity building for ensuring sustainability.

The experience of the ILO in developing and assisting employment-intensive public works programmes during the past two decades in over 30 countries in Africa and Asia, including conflict-affected countries, has demonstrated that the labour-intensive approach to infrastructure and other construction programmes provides considerable scope and flexibility for both direct job creation and income generation as well as long-term employment opportunities through the use of the infrastructure. At the same time, the ILO approach has integrated with the construction of physical infrastructure the strengthening of social institutions, including the development of the capacity of local communities to effectively participate in project planning and implementation and creation of the frameworks within which populations concerned are provided with the opportunity to negotiate with public authorities and other relevant actors. Drawing on the ILO's experience in Cambodia, Mozambique and Uganda, this report analyses policy and operational issues of employment-intensive public works programmes in a post-conflict situation.

This report was prepared by Mr. Ramesh Srivastava with the participation of Mr. Mir Zekrya and with contributions from Mr. Guha who carried out a mission to Uganda and Cambodia ad from Mr. Mayer who undertook a mission to Mozambique.

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I. Introduction

1. This paper examines the relevance and potential of employment-intensive public works programmes (EIPW) in the reintegration of demobilized combatants into civilian life. For this purpose, it draws upon three country studies on Cambodia, Mozambique and Uganda(1) and other complementary material on infrastructure rehabilitation and maintenance in post-conflict situations.

2. It is organised as follows. Following this introduction (section I), section II mentions briefly the characteristics of post-conflict socio-economic situation in the three countries and provides information on damage to infrastructure. Section III discusses the relevance and objectives of employment-intensive public works programmes in the three countries with special reference to ILO experience in the rural roads subsector and the use of labour-based technologies. Section IV deals with importance of government policies for employment-intensive infrastructure construction. Section V examines some planning, programming and implementation issues. The final section VI brings together lessons of experience, and some of the operational conclusions and recommendation on the planning and implementation of such programmes. A comparative table in this section illustrates the main differences between normal and post-conflict situations on the basis of a number of planning, design and implementation items.

II. Characteristics of Post-Conflict Countries: Damage to Infrastructure

3. Among the many challenges facing national authorities in post-conflict reconstruction are the twin tasks of stimulating economic activity and generating employment and incomes for the conflict-affected population. The three conflict-affected countries (Cambodia, Mozambique, Uganda) have been classified as least-developed countries with low per capita incomes and a large rural subsistence sector. A significant proportion of the population, if not the overwhelming majority, derives its livelihood from agriculture and agriculture-related activities. In their reconstruction strategies, therefore, national authorities have focused on the rural sector to which a large proportion of the conflict-affected target groups are likely to return: refugees, internally displaced persons, demobilized combatants and their dependents.

4. The size of all these target groups is very large. In **Cambodia**, 40,000 combatants were rapidly demobilized in 1992 and another 70,000 will be demobilized when conditions permit. In **Mozambique**, about 14,000 were demobilized prior to the current programme which covered about 95,000 combatants. In **Uganda**, about 50,000 combatants are being demobilized in three phases. To these figures should be added the dependents of demobilized combatants, on an average rate of 1:3.

5. In addition, there were 380,000 refugees and 190,000 internally displaced persons to be reintegrated in **Cambodia** when the Paris Peace Agreements were signed in October 1991. In **Mozambique**, the number was about 1.5 million refugees and over 4.2 million internally displaced persons when the Rome Peace Agreements were signed in October 1992. In **Uganda**, at the end of the civil war in January 1986, there were an estimated 350,000 refugees and 600,000 internally displaced persons.

6. The task of creating employment and incomes, of course, extends beyond these special groups. Account should be taken of the conflict-affected population within the country, the existing situation of unemployment and underemployment and the normal additions to the labour force.

Economic and Social Situation

7. On the other hand, the capacity of the economy to absorb such large numbers in productive activity is extremely limited. Besides their low level of development in the pre-conflict period, there has been a rapid decline in economic performance during the conflict. In **Cambodia**, agricultural output had dropped to half its pre-war levels in the late 1970s. In **Uganda**, per capita food production fell at 1.7 per cent per year on an average during the period 1971-1981. In **Mozambique**, food insecurity had reached alarming proportions in the 1980s. A large proportion of the population in the three countries is in a state of absolute poverty; estimates vary from 20 to 50 per cent depending upon the group of indicators used.

8. Economic growth has been uneven in all the three countries. In **Cambodia**, GDP growth was estimated at 2.4 per cent in 1989, -0.1 per cent in 1990 and 13.5 per cent in 1991. It is estimated to remain around 8 per cent per year in the period 1992-1996 but it will take time for output levels to rise to pre-war levels. In **Mozambique**, GDP growth was -3.4 per cent per year on average during 1981-1987, 2.4 per cent during 1988-1992 and -0.5 per cent in 1992. GDP in agriculture experienced a negative annual average growth rate of -6.5 per cent in 1992 while industry experienced a large -8.1 per cent decline. In **Uganda**, real GDP growth during 1981-1987 was negative, averaging -1.4 per cent. It picked up during 1988-1992 with an annual average of 4.6 per cent. Agriculture grew at 3.3 per cent annually during 1988-1992 and industry at 8.3 per cent. However, the economies of all three countries remain structurally weak and unbalanced, and overwhelmingly dependent on external aid.

9. The impact of the conflict on the social situation has been devastating. Most importantly, the war weakened the social, community and family structures and decision-making systems in the three countries. The share of women-headed households has increased significantly, varying from one-fifth to one-third of all households. The three countries have low human development levels as measured by a series of human development indicators: Cambodia ranks 147, Uganda 154 and Mozambique 159 out of 173 countries(2).

10. Infrastructure construction, rehabilitation and maintenance can provide the physical framework for economic growth and social reintegration in this context. Public investment on infrastructure can be used as a valuable operational tool to provide the much needed economic stimulus, especially when it is directed towards providing basic services to the rural sector. At the same time, it can provide urgently-needed employment and income opportunities to very large-numbers of the affected population, if it is designed to draw upon local human, material and institutional resources in an integrated manner.

Infrastructure: A target for destruction

11. **This approach coincides well with the situation in most conflict-affected countries because physical infrastructure becomes a prime target for damage or destruction during conflicts.** Opposing forces damage or destroy infrastructure, especially roads, bridges, railway tracks and transport systems to isolate the enemy or the population supporting it, and to obstruct supplies and reinforcements. The retreating forces tend to adopt a "scorch-earth" policy damaging key installations and facilities for similar ends. In the process, schools, clinics and health centres, water supply systems, irrigation works, communication networks, and personal and community property are severely damaged or destroyed, and rural activities including agriculture are disrupted.

12. **However, an assessment of the damage to physical infrastructure in the immediate post-conflict period remains problematic for a number of reasons. Perhaps the most important reason is the limited capacity of most post-conflict governments to undertake comprehensive damage assessment.** Shortage of trained staff as well as financial resources often affect this capacity. Usually, government administrative structure in the conflict-affected provinces or districts is much weakened or non-existent. In addition, there are many urgent tasks related to the reestablishment of central government structures in the post-conflict period. Assessment of damage to infrastructure, especially in the rural areas, may not always get high priority.

13. Thus, assistance is often sought from multilateral and bilateral aid agencies in carrying out such assessment. A rapid assessment is often carried out in the context of humanitarian relief operations and the need to provide food aid, shelter or medical relief to vulnerable populations in targeted communities. An emergency programme to rehabilitate some essential parts of physical infrastructure--roads, bridges, clinics and health centres, food distribution centres and warehouses--is developed in this context. Examples of such rapid assessments and emergency needs are incorporated in the periodic "appeals" issued jointly by the UN system and the government.

14. More complete assessments are also hindered by the **inaccessibility** of large parts of the country because of the deterioration and damage to the road network especially in the rural areas; or **insecurity** caused by frequent recurrence of armed conflict in some parts of the country or **banditry**. Even where peace has been restored in most of the country, the presence of **landmines** can prevent access and increase the risks for those involved in assessment of damage. These factors are discussed in the specific country context in section V.

Damage to Infrastructure

15. In spite of various difficulties, some estimates of infrastructure damage are available in the country for initial planning purposes. The following description relates mainly to the rural road network since the ILO has been working in this subsector.

16. In **Cambodia**, an Infrastructure Survey Mission was organized by UNDP in 1990(3). In **Mozambique**, a large amount of information was collected and included in the studies which were part of the World Bank funded Roads and Coastal Shipping Projects(4). In **Uganda**, a joint government and donor effort helped develop not only an assessment of needs but also a series of strategies, a plan of action and a financing plan for the rehabilitation of rural roads(5).

17. In **Cambodia**, almost two and a half decades of political strife and war left the rural infrastructure, such as roads, bridges, irrigation system and community settlements in ruins. An

estimated 3,000 km of provincial roads and 28,000 km of rural and tertiary roads are in disrepair, a significant number of the country's 4,100 bridges have either been damaged or destroyed. Widespread deterioration and destruction is evident in all infrastructure subsectors, partly owing to war-related damage, partly due to deficient maintenance over many years, and partly to poor management and financial neglect. The condition of the rural road network has further deteriorated over recent years with continued use by heavy vehicles and with little maintenance being carried out(6).

18. In **Mozambique**, the national roads system contains about 4,600 km of paved roads and about 24,500 km of earth or gravel roads. These roads have not received the required maintenance inputs for more than a decade. A large proportion of these roads suffer from pavement deficiencies with only 10 per cent in good condition, and over one-third in impassable condition even with 4-wheel drive vehicles. The degradation of the road network has been compounded by frequent and recurrent damage and destruction during the war. Secondary and tertiary roads, especially feeder roads, are in particularly poor condition; over 40 per cent are reported to be impassable. Accessibility to most parts of the country has seriously declined(7).

19. In **Uganda**, the national road network consists of 7,800 km of trunk roads, 780 km of urban roads and about 21,200 km of rural feeder roads. The feeder roads network is generally in poor condition, and in some areas impassable. The drainage system is non-existent in most cases with culverts blocked or completely broken down. Many bridges are very narrow or broken, and in some areas incapable of carrying existing or anticipated traffic. Road carriageways are badly eroded with a gullies and potholes, corrugated and characterized by overgrown vegetation. In swampy areas, roads are usually flooded and impassable during the rainy seasons. Of the 21,200 km of gravel/earth roads, about 60 per cent need full rehabilitation. It is estimated that 10 per cent of the remaining roads will deteriorate further every year and will need rehabilitation as well(8).

20. The cost of these reconstruction, rehabilitation and maintenance programmes are large. An estimated $30 million of foreign investment will be required in **Cambodia** to rehabilitate 1,000 km over 7 years 1994-2000(9). In **Mozambique**, it is estimated that about $ 52.9 million will be required for the first phase of rehabilitation over a four-year period including projects in progress or about to be started(10). In **Uganda**, the total cost of rural feeder roads rehabilitation and maintenance has been estimated at $ 171.2 million over a 5-year period for about 18,000 km(11).

21. The similarity in the description of damage to the rural feeder roads network in the three countries is not surprising. It is evident that they have gone through a comparable experience of damage and decline in the rehabilitation and maintenance of rural roads. The above summary illustrates the enormous size of the problem in both physical and financial terms. At the same time, it is evident that more detailed assessments must precede any programme to rehabilitate specific roads. Careful attention is thus required during programme formulation to detailed damage surveys.

III. Objectives and Relevance of EIPW: Country Experience

22. The labour-intensive approach to rehabilitation and maintenance of rural infrastructure, in contexts such as those described in the preceding section provides considerable scope and flexibility "both for direct employment creation through actual construction and maintenance works and for 'downstream' indirect employment generation through the self-reliant ('affordable') use of basic infrastructures". The injection of cash into the conflict-affected rural economy at the household level creates linkage effects with various productive activities in the area, and contributes to further asset creation. Improved access to economic services (e.g. marketing of agricultural produce) and to social services (schools, health centres) contributes to improvements in levels of living. The involvement of local human and material resources and local know-how contributes to capacity building(12).

23. **Thus, in a post-conflict environment, employment-intensive public works programmes can serve multiple objectives:** direct and large scale employment creation, direct asset creation, releasing transport and production bottlenecks, stimulating trade and commerce, local and national capacity building, facilitating access to economic and social services, and stimulating economic growth. All these, in turn, contribute to improvement in living conditions of the conflict-affected population. **The fact that EIPWs can simultaneously address several objectives is a distinct advantage over other approaches.**

Country Experience

24. **In Cambodia, given the huge task of construction, rehabilitation and maintenance of infrastructure, the ILO concentrated its attention on demonstration and replicability, and acceptance of the employment-intensive approach by national authorities and funding agencies.** This was all the more important because of the legacy of a failed mass labour mobilization programme, the poor quality of infrastructure construction and the disregard for human rights during 1975-1978.

25. The **ILO project on Labour-based Infrastructure Rehabilitation and Development** started in October 1992 as part of an umbrella Employment Generation Programme (EGP). It aimed at rehabilitating essential rural infrastructure, in particular, rural roads and irrigation schemes in six provinces but concentrated its activities in four northwestern provinces (Siem Reap, Banteay Meanchey, Battambang and Pursat). These provinces had the highest concentration of demobilized combatants (30,000), returnees from refugee camps in Thailand (20,000) and internally displaced persons (about 90,000). The project used the results of the 1990 UNDP Infrastructure Survey, and responded to UNHCR's requirement for rapid rehabilitation of 150 km of secondary and tertiary roads for resettlement and access to food distribution points. It also took account of Adventist Development Relief Agency's 1990 survey of Barai Irrigation scheme. In addition, to complement the above technical information, the project carried out detailed project identification surveys of both roads and irrigation schemes in September-October 1992(13).

26. By the end of 1994, the project had constructed or rehabilitated 220 km of secondary roads. Against a target of up to 4,000 employment opportunities per workday, it was able to reach 6,000 workers per workday to generate 1.05 million workdays of employment. Nearly 60 per cent of the workers were women. The project was not targeted to demobilized soldiers but of the remaining 40 per cent, a good proportion was drawn from them as well as from returnees and internally

displaced persons. The project was able to achieve high technical standards in road rehabilitation at a very competitive and cost-effective level (table). It also rehabilitated 56 km of secondary and tertiary canals of Barai and Bovel Irrigation systems covering 12,000 hectares. In addition, it provided training to more than 150 roads and irrigation engineers, trained 10 small contractors and entered into rehabilitation/maintenance agreements with them, and provided literacy training to about 1,000 persons mainly women.

27. Community participation was sought in site selection, labour recruitment, establishment of Water Users' Associations, and road maintenance systems. The project established linkages with NGOs and other organizations in both planning and implementation in order to enhance its reach and its benefits. It introduced safety standards at worksites and prepared guidelines for worker compensation for injuries arising from work accidents. The project developed special guidelines for employing disabled persons on road, irrigation and agricultural works including adaptation of tools for their use.

Table 1: Comparative cost per km of Road Construction (US$)

Labour-based Programmes

UNDP/ILO			CARERE	CONCERN
Battambang	Siem Reap	Takeo Kandal	Battambang	Pursat
8,600	6,200	5,600	11,500	10,000

Equipment-based Programmes

UNDP/OPS	USAID	EEC/ANS
Pursat	Battambang	Battambang
20,000	26,000	24,000

28. The scope for undertaking employment-intensive rural infrastructure construction, rehabilitation and maintenance in **Cambodia** is enormous. A large number of such programmes are already underway, and the pioneering work of several donors, NGOs, UNDP and ILO has already helped to increase the acceptance of this approach. Among the programmes sponsored by donors and funding agencies, mention should be made of Special Action Programme for rehabilitation and resettlement projects at the community level **funded by Australia.** A six-year rural infrastructure improvement project has recently been approved by the Asian Development Bank(14). A large **UNDP/UNHCR Cambodia Reintegration and Resettlement Programme** (CARERE) was initiated in 1992. It includes a substantial amount of employment-intensive rural works, and aims at community rehabilitation through an area development approach(15). Among the programmes sponsored and implemented by NGOs, there is minimum involvement in the rural roads sector (e.g. CONCERN) but employment-intensive techniques are being followed in rural

water supply, small scale irrigation, school construction, clinic and health post construction with high levels of community participation and self-help(16).

29. In both **Mozambique** and **Uganda**, employment-intensive technology for rural road construction, rehabilitation and maintenance is well-accepted. Both countries have a fairly well-developed programmes for rural road rehabilitation.

30. In **Mozambique**, the Economic and Social Rehabilitation Programme (ESRP, 1990) accorded priority to public employment programmes focused on basic economic and social infrastructure. A series of ILO projects (MOZ/85/007; MOZ/89/009) assisted the Government in introducing labour-based road improvement and maintenance systems which eventually developed into the Feeder Roads Programme (FRP). These projects demonstrated the technical feasibility and economic viability of the employment-intensive approach as well as its replicability, cost-competitiveness and cost-effectiveness in the Mozambican context. The Feeder Roads Programme is now a component of the larger World Bank and multi-donor Roads and Coastal Shipping Projects (ROCS I and II) which were initiated in 1992(17). **FRP has three major objectives: rural road rehabilitation and maintenance, employment generation, and capacity-building at the national, provincial and local levels.** It seeks to remove one of the principal constraints, that of limited access, to agricultural and rural development in the country(18).

31. FRP is organized on the basis of district labour brigades. Starting with 2 labour brigades of about 300 each in 1989, it had developed to 23 brigades of 150 to 250 each in 23 districts in 1994. It had undertaken 430 km of full rehabilitation and 225 km of selective rehabilitation, generating in the process approximately 6,356 workyears or 1.6 million workdays of employment. The programme is not specifically targeted on demobilized combatants. However, labour-intensive reforestation projects funded by Italian bilateral aid in Manica province are reported to be employing several hundred ex-combatants on a full-time wage basis. The average cost of road rehabilitation is approximately $ 8,000/km. Considerable training of national officials from the National Directorate of Roads and Bridges (DNEP), Provincial Road and Bridge Maintenance Enterprises (ECMEPs), supervisors, local contractors and workers in construction, rehabilitation and maintenance has taken place. The programme has created widespread linkages with many on-going activities of NGOs, bilateral and multilateral agencies and has attracted considerable donor attention. A gradual expansion of the programme to the entire country has been planned by the Government which involves expansion to 40 brigades creating approximately 9 million workdays of employment.

32. Several other programmes sponsored and funded by **NGOs, bilateral and multilateral donors** have adopted the ILO's labour-based approach(19). However, the programmes have not specially targeted demobilized soldiers; they are open to all conflict-affected groups. Women's participation has averaged 10 per cent.

33. **Uganda** has used employment-intensive approach in rural roads construction, rehabilitation and maintenance for a long time. The earliest ILO-supported projects started in the 1980s on a pilot basis in Karamoja. In all, six ILO-supported projects have contributed to the development of the approach(20).

34. Among **donors and NGOs**, mention should be made of important programmes by **Lutheran World Federation** in Karamoja, West Nile, Rakai and Moroto; by **Germany** in 3 districts in the Western region for rehabilitating 350 km by a mix of equipment and labour intensive techniques;

by Japan (JICA) in 3 districts in the southeastern region for rehabilitating 450 km. All these programmes are open to all conflict-affected groups including demobilized combatants.

35. **The most important reintegration project targeted to demobilized combatants has been funded by Germany through KFW. It is expected to start in 1995 and would rehabilitate and maintain feeder roads in 10 districts in the southeastern part of Uganda through labour-intensive techniques. The Ministry of Local Government is responsible for implementation. The Ministry will liaise closely with Uganda Veterans Assistance Board for recruitment of demobilized combatants and to monitor the number employed.**

36. **Uganda has developed a comprehensive strategy for Rural Feeder Roads Rehabilitation and Maintenance.** The strategy proposed that "labour based methods or a combination of equipment/labour based methods will also be tried out. Use of labour based methods will be gradual as it is a new technique and involves intensive training of personnel". It is anticipated that 1,400 km would be rehabilitated by labour based methods(21).

37. The above analysis clearly shows that there is an enormous task for infrastructure construction, rehabilitation and maintenance in the rural road sector alone which can potentially form an important part of post-conflict national reconstruction. In some cases, important steps have been taken by post-conflict governments and their bilateral, multilateral and NGO partners to undertake comprehensive planning for this purpose and to develop policy and action frameworks. In all cases, the beneficiaries are conflict-affected target groups: refugees/returnees, internally displaced persons and demobilized combatants and their dependents. Projects specifically targeted to reintegration of demobilized combatants through infrastructure rehabilitation are the exception.

IV. Importance of Government Policies for EIPW

38. The preparation of post-conflict national policies and strategies is a complex task. National reconstruction strategies tend to be broad and indicative in nature. They are heavily influenced by the country's bilateral and multilateral partners who assist in the formulation and elaboration of such strategies. Detailed sector analysis and programmes are not always available during the post-conflict period. Often, sectoral policies and strategies evolve over the years out of accumulated experience.

39. This is especially true of the rural roads sector as illustrated by the experience in the three countries. In Cambodia, the National Programme to Rehabilitate and Develop Cambodia was prepared to serve as a major input to the ministerial meeting of the International Committee for the Reconstruction of Cambodia (Tokyo, 10-11 March 1994), two and half years after the signing of the peace agreements. It recognized that "the country's debilitated infrastructure constitutes a binding constraint to development" and included "repairing, rehabilitating and constructing rural roads" as one of the priorities in rural development. It also included this item in the external investment list. The government indicated priorities for rural road rehabilitation.

40. The process was facilitated by external agencies e.g.UNDP, World Bank, Asian Development Bank, bilateral donors and NGOs. However, a concise document outlining the policy and strategy for the rural roads sector and for reintegrating conflict-affected groups in it is not yet available.

41. **From the available documentation, however, it is possible to put together some elements of the government's policy on EIPW in Cambodia.** Firstly, it appears that rural infrastructure construction and rehabilitation is taking full consideration of (a) intensity of damage, (b) concentration of target groups e.g.demobilized soldiers, returnees and internally displaced persons, and (c) employment creation. Thus, it has high conflict-specificity; and its focus is both well-directed and timely. The fact that new appeals to donors have been made for the expansion of the ILO-assisted programmes, and a new project has been negotiated with the Asian Development Bank, indicates that the government is supportive of the employment-intensive approach.

42. The original ILO project proposal was directed towards the reintegration of demobilized combatants. However, the recurrence of hostilities did not permit the demobilization programme to go ahead. The target group was broadened to include returnees and internally displaced persons.

43. The prioritization of rural roads to be rehabilitated appears to be based on several criteria. Among these are: **conflict-related criteria** e.g. concentration of returnees, internally displaced persons, demobilized soldiers, parallel programmes for the clearance of landmines, roads in secure areas where reconstruction activities can safely take place; **economic criteria** e.g. high potential for agricultural development, availability of labour including seasonal fluctuations to take account of agricultural cycle; and **social criteria** e.g. very poor areas where employment creation would benefit vulnerable population, where communities are willing and committed to labour-based road maintenance etc.

44. In **Mozambique** also, a formal document outlining the government's policy on the Feeder Roads Programme (FRP) is not available. However, the Economic and Social Rehabilitation Programme adopted by the government in 1990 accorded priority to the rehabilitation of rural roads and reopening of access to the rural areas of the country. It also recognized that the poor condition of all transportation infrastructure was the single most limiting constraint to a rapid recovery.

45. The inclusion of a feeder roads programme within the framework of the Roads and Coastal Shipping Project, the inclusion of as many as 18 projects (including the ILO project) funded by various donors in this sector, and the organization of annual donor meetings by the Core Management Unit in the Department of Roads and Bridges to enhance coordination and effectiveness of the programme are clear indications of the direction of government policy and priority for labour-intensive programmes.

46. The selection of the programmes and areas appears to be in line with the conflict-affected target groups: returnees, internally displaced persons and demobilized soldiers. It also takes account of the presence of landmines in various parts of the country as well as considerations of security.

47. **Among the various elements of policy which can be grouped together from the Mozambican experience, the more important ones are:** (i) government's acceptance of labour-based technologies for rural road rehabilitation and maintenance as sustainable; (ii) decentralized implementation of rehabilitation programmes and the need for capacity building at various levels--at the national level for managing the feeder roads programme and coordination of externally funded projects, at the provincial and local level for implementation and technology transfer and for introducing maintenance systems which rely on local participation and locally available resources; (iii) concentration of direct benefit on the rural target groups by sensitive selection of roads and areas of operation; and (iv) employment creation for the conflict-affected population.

48. The fact that a further expansion of the ILO-supported programme is being sought and new projects using labour-based techniques (e.g. UK/ODA feeder Roads Project in Zambezia province) are being approved is further indication of the government's commitment and support for employment-intensive public works programmes. In the latter project, selection of feeder roads is to be based on specific economic and social criteria. The economic criteria include existing road condition, existing traffic volume, estimated future traffic volume and estimated cost of rehabilitation to maintainable standard. Among social criteria, population served and availability community services (water for household use, shelter, schools, public health facilities) are included. As part of **conflict-related criteria**, concentration of internally displaced persons is mentioned. The selected roads must be within a designated priority district and security conditions should permit construction work to be carried out with reasonable safety.

49. In **Uganda**, there is a well-developed policy and strategy for an integrated rural feeder roads (RFR) rehabilitation system. It has been developed over time with the active participation of bilateral and multilateral agencies and the Ministry of Local Government. RFR rehabilitation and maintenance is among the top priorities for investment.

50. Among the major objectives of the programme are economic: to ensure access to rural areas; increase access to potentially productive areas; promote agricultural, livestock or other economic activities of importance in the region; and social: to facilitate access of the population to social services, complement other rehabilitation programmes in the area, respond to natural calamities. The selection of priority roads reflects conflict-related criteria e.g. concentration of returnees, internally displaced persons and demobilized combatants.

51. The targeting of rehabilitation activities on the disadvantaged rural population including a project specifically for demobilized combatants indicates that the policy is clearly directed towards increasing employment and incomes.

52. As regards technology, government policy contains various options to be adopted as appropriate. These include **contracting**: equipment-based large and medium scale contracts, labour-based medium and small scale contracts; **force account**: externally financed and locally managed equipment-based programmes, government financed direct labour and equipment based operations and locally financed labour based programmes. The government envisages an increase in contracting and a reduction in force account activities. It clearly states that the use of labour based methods will be gradual as it is a new technique and involves intensive training of personnel.

53. The employment-intensive approach to infrastructure construction, rehabilitation and maintenance involves the use of working methods and systems that appreciably increase the labour content through a cost-effective combination of labour and light equipment. Although the labour intensity of such operations may vary widely, the most significant aspect of the approach is to give priority to employment considerations and to utilizing the available labour support where necessary by light equipment rather than heavy equipment supported by labour. **This is especially important when the objective is dual targeting: on creating employment and incomes for conflict-affected groups such as demobilized combatants and on stimulating economic activity through increased income and access to socio-economic facilities and services.**

54. Such dual targeting is implicit in the various policies discussed above but it appears desirable to provide, in a conflict-affected context, a clearer and more explicit statement of policy which brings together all the elements of national policy and priority which bear upon the subject.

55. Such a statement can be developed around the following principal elements.

(i) **Clear objectives**: The statement should emphasize **three mutually reinforcing objectives, viz. employment creation, infrastructure construction/rehabilitation/maintenance, and capacity-building. These objectives reflect the reality of post-conflict economic, social and administrative situation.**

(ii) **Conflict-specificity**: It should briefly discuss the conflict-specific context and deal with issues of security, landmines, and related aspects.

(iii) **Targeting**: It should specify, to the extent possible, the direct beneficiary population e.g. demobilized combatants and their dependents, returnees, internally displaced persons and others. The targeting is important for measuring social and economic impact beyond the direct effects of road access. This would, in turn, imply a minimum degree of monitoring of beneficiaries, specially if food-aid is also combined with cash/wage payments.

(iv) **Technology**: The options for technology are important for both engineering and economic considerations. Several factors should be considered in this respect. In **engineering terms**, the overriding considerations are speed and quality of the works, their replicability and sustainability, and the capacity of the engineering departments to manage them. In all conflict-affected countries, the size of the problem is too large to be handled by inadequately staffed government agencies, whether at the central, provincial or local levels; hence shifting the responsibility to local authorities (e.g. Uganda) or local communities for some of the activities is important in all cases. Labour-intensive methods should be used wherever it is possible to produce **cost-effective** outputs with **adequate quality** standards at **competitive prices**. The **Cambodia** case illustrates this scenario. Both replicability and sustainability depend upon the speed with which capacities can be built. **In cases where communities need to be involved, careful attention must be paid to their availability, commitment and capacity to carry the responsibilities involved.** This may not be easy in all areas and for all population groups. Targeting should be viewed also in this context.

(v) **Prioritization**: In all the three cases, criteria for road selection or area selection are stated. In all cases, more importance appears to be given to engineering over economic and conflict-related social considerations. Viewed in isolation from the country context, such criteria give the impression of business-as-usual approach. It is important that such an impression is corrected both in national documents and donor proposals.

(vi) **Linkages**: It is important to emphasize the linkages of employment-intensive infrastructure programmes with other on-going activities for the target population and target area. Many such activities are dependent upon improved access to the area and would reinforce and expand the benefits consequent upon improved access. In particular, activities of the NGOs at the community level could be very significant in this regard.

V. Planning, Programming and Implementation Issues

56. **In planning employment-intensive public works programmes, including all types of physical infrastructure (roads, bridges irrigation systems, schools, health facilities, etc.) in the rural sector, attention has to be paid to four types of resources: investment capital, wage payments, institutional capacity and labour(22). All these resources are affected in varying**

degrees by conflict. It is, therefore, advisable to develop a specific conflict focus in the methodology used for planning, designing and implementation of EIPWs.

Conflict-related factors

57. A first group of factors to be considered are those mentioned in paragraph 14: **inaccessibility, insecurity and landmines.**

58. **Inaccessibility.** Long periods of conflict in the three countries under review have compounded the problem of damage assessment and planning for construction and rehabilitation of physical infrastructure. As the brief description in section III has shown, planning for rehabilitation becomes difficult because the accessibility of roads to be rehabilitated is extremely low and this creates difficulties in gathering the required amount of engineering and socio-economic data and information. In a normal situation, this factor can be overcome with less difficulty.

59. **Insecurity.** In all the three countries, insecurity has continued to be a problem, at least in certain parts of the country, during the post-conflict period. In **Cambodia**, the non-participation of the Party of Democratic Kampuchea in the May 1993 elections, the breakdown of peace talks in May 1994, and the adoption by the new government of legislation outlawing the Khmer Rouge in July 1994 have contributed to resumption and escalation of conflict in some parts of the country. This has affected the process of demobilization of combatants and slowed down the launching of full-scale reconstruction and rehabilitation(23). In **Mozambique**, insecurity has been caused largely by a massive movement of the population. In addition, demobilized combatants have been involved in 371 violent incidents before and after demobilization(24). Such incidents contribute to micro-level insecurity. Easy availability of arms, widespread unemployment and shortage of food contribute to increase in banditry, violent incidents and crime in a fluid social situation where population groups have not settled down. In **Uganda**, the major cause of insecurity is the presence of large numbers of refugees and floating population in some parts, especially along the borders; exiled rebels, former soldiers and armed militia in other parts. In all post-conflict situations, insecurity complicates the task of rehabilitation of physical infrastructure.

60. **Landmines.** "It is common in many conflicts for key elements of the national infrastructure to be mined by both sides to the conflict. Roads, power lines, electric plants, irrigation systems, water plants, dams and industrial plants are often mined during civil conflicts. In the aftermath of those conflicts, it is often impossible to approach such facilities to repair them or conduct needed maintenance ..... Transportation of goods and services is halted on mined roads and the roads themselves begin to deteriorate. Local businesses, unable to obtain supplies or ship products, cease operation. Unemployment in those areas increases and the prices for scarce goods tend to enter an inflationary spiral, increasing the cycle of misery. In those areas, dependent upon outside aid for sustenance, the mining of roads can mean a sentence to death by starvation"(25).

61. Among the countries under review, **Cambodia** and **Mozambique** have an extremely serious landmine problem which has complicated the construction, rehabilitation and maintenance of physical infrastructure.. In **Cambodia**, it is estimated that 7-10 million mines were laid during the period 1979-1991. For all parties to the conflict, the main purpose of laying landmines was to limit military operation by enemy forces: to deny opponents access to bridges, roads or strategic installations. Mines were used to channel and control the movement of people and deny them access to land. **Mozambique** is reported to have about 2 million mines. Most mines were laid in a random fashion and targeted to civilians, mainly to terrorize them and deny them access to fields, water sources and fishing points. In the southern provinces, mines were laid to discourage the

return of displaced persons to their homes. Mining was also undertaken to achieve route denial including major roads, supply routes and rural tracks(26). In **Cambodia**, roads had to be selected and reselected for rehabilitation because of the presence of landmines. In both **Cambodia** and **Mozambique**, road rehabilitation depended upon the mine clearance programme.

62. The presence of landmines not only increases insecurity but it also adds to the cost of rehabilitation and maintenance of infrastructure. To every project for the rehabilitation of feeder roads, for example, a mine clearance component has to be added. Alternatively, mine clearance needs are met by separate national or regional projects. The average cost of mine clearance is estimated to be $ 300 - $ 1,000 per landmine(27). As an example, two maps on road accessibility and roads requiring mine clearance from Mozambique are included in Annex 1.

63. Conditions in many areas of the three conflict-affected countries are extremely difficult for the reasons mentioned above. In addition, there are serious problems of food availability, drinking water, health and sanitation which complicate reconstruction and rehabilitation efforts. **This underlines the need for a concerted strategy in which reopening access is accompanied by varied number of complementary programmes to facilitate reintegration. This aspect must be considered at the planning stage and infrastructure rehabilitation linked to the series of complementary measures.**

64. **Another conflict-related factor important at the planning stage is the selection of target group or target area.** In the three countries under review, a variety of targeting mechanisms have been adopted. In deciding on this approach, several points need to be noted. **Firstly, funds may be available from donors for specific groups** e.g. UNHCR funds for returning refugees in all three countries; in **Mozambique**, separate programme and coordinating arrangements were made for demobilized soldiers. In **Uganda**, one road rehabilitation project is targeted to demobilized combatants. Secondly, if funds are available for **area development**, e.g. CARERE in **Cambodia**, PROAREA in **Mozambique**, how would target areas/districts be selected? In **Mozambique**, for example, areas of concentration of returning refugees are different than areas to which demobilized soldiers have gone. Annex 2 contains four maps to illustrate the situation. The first map 2.1 shows the districts to which about 1.6 million refugees already returned as of October 1994. The second map 2.2 shows UNHCR's priority districts for 1995 reintegration programme for returnees. The third map 2.3 shows the final destination of demobilized soldiers. The fourth map 2.4 shows the concentration pattern of internally displaced persons in September 1994. Thirdly, priority districts for rural infrastructure rehabilitation may be selected on yet other criteria. **Fourthly, the importance of avoiding disparities in benefits and access offered by different programmes of infrastructure rehabilitation, however targeted, must be considered at the planning stage. It should be a critical factor in the design of programmes**, especially where programmes are funded by a variety of external donors and agencies and different government agencies are responsible for the separate programmes.

Factors aggravated by conflict

65. Among the factors aggravated by conflicts are the four resources mentioned in paragraph 57 above. **Investment capital** for the rehabilitation of infrastructure will always be insufficient in relation to requirements. Its availability will depend on competition with other post-conflict programmes; hence it must be justified on both economic and social grounds. An early review of labour-based public works programmes in developing countries found that they can yield acceptable market rates of return even when workers are paid fully competitive market wages(28). In several

donors projects in **Mozambique** and **Uganda**, this has been confirmed during project formulation and appraisal. Moreover, external capital investments tend to taper off after the initial post-conflict years; hence the importance of careful, strategic priority-setting for infrastructure investments by national authorities.

66. **Wage payments** are a high proportion of the cost of infrastructure programmes using labour-intensive methods. They vary from 45 to 65 per cent of project costs(29). In post-conflict situations, the availability of local funds for wage payments is seriously limited and this can affect the implementation of the programme. The need for an adequate level of local financial resources on a sustained basis for wage payments should be examined at the planning and design stage. The budgets of the appropriate ministry/agency responsible for the programme should include the required level of recurrent costs. This constraint is often sought to be reduced by (i) donors funding the project also providing some part of local costs, and (ii) food aid substituting half of the wage costs. The need to link capital aid and food aid on a more comprehensive and integrated manner should be explored further in this context. Another problem to be looked at is the decision-making and disbursement procedure by which the flow of funds to the project can be assured on a systematic basis. This involves decentralization of administrative and financial authority to provincial or local agencies, and depends upon adequate staff and institutional capacity.

67. **Institutional capacity** remains a significant problem even where there is no conflict but is greatly aggravated in a post-conflict situation. Conflicts are accompanied by a flight of trained manpower. Serious losses also occur through conflict-related injuries and deaths. Shortages caused by these factors are aggravated by an expansion of infrastructure reconstruction and rehabilitation programmes. In **Uganda**, an estimate of the manpower needs of the engineering and works departments for the rehabilitation programme shows that at the national level 40 posts of senior engineers are required against 7 filled, 22 middle level posts are required against only 1 filled; at the district level, as many as one-third of all middle level posts are unfilled(30). In such a situation, programming can be excessively externally dominated or influenced and capacity-building tasks can be neglected.

68. **Considerably more efforts at capacity building are, therefore, required in the post-conflict environment.** There is need for an overall strategy for training and institution-building into which training and capacity-building components of individual projects can be fitted and gaps identified. Such overall strategies have been developed in **Mozambique** in the ROCS project and in Uganda in the context of the RFR strategy.

69. **In addition, there is an urgent need for inter-country analysis and exchange of comparative experience to identify mechanisms and approaches to common problems. This should be especially feasible in infrastructure rehabilitation as seen in section III.**

70. **Project development and implementation for rural infrastructure projects always devolve on the local administrations.** Very realistic assessments of capacity at these levels are required in relation to the rehabilitation/ reconstruction workload and the administrative and managerial demands of projects funded by a variety of external donors. The shortage of middle-level technical and managerial personnel is a particularly acute problem at the district level. In spite of various efforts at decentralization, there are often inadequate links between upper and lower tiers of decision-making.

71. **Disrupted social structures.** Conflict aggravates the problem of local capacity well beyond the government administrative structures. **The capacity of the communities themselves can be**

a serious constraint. Among the factors affecting the capacity of the communities to participate, implement or take responsibility for rural infrastructure rehabilitation and maintenance are: post-conflict trauma, inadequate living conditions, lack of social cohesion causing leadership and responsibility-related problems, and instability in the local environment (especially where large movements have taken place recently). In **Mozambique**, for example, it is still too early to verify "the extent to which power and decision structures still exist, or are being revived, in each community.... The very existence of an adequate level of decision and execution is a prerequisite to any intervention from outside, in view of the huge disruption of communities and the still incipient or unknown level of stability of returnees and internally displaced persons"(31). Annex 3 shows the intensity of migration in Mozambique to illustrate the problem.

72. This would, in turn, affect the **availability of labour** for employment-intensive infrastructure programmes. Availability of labour is also influenced by targeting strategies. **If the programme is specifically targeted to demobilized soldiers or conflict-affected population generally, this implies that estimates of labour availability have been made during project preparation.** Labour availability in the rural sector is also a function of the agricultural cycle, especially where project-induced employment is temporary and secondary to the workers' main economic activity (agricultural). In areas where there is a high proportion of **women-headed households**, special steps need to be taken to encourage their participation in infrastructure projects. In areas where there is a high proportion of **disabled ex-combatants or civilians** (a frequent experience in conflict-affected countries), special arrangements need to be made in promoting their involvement in infrastructure projects. In **Cambodia**, guidelines were prepared and tools were adapted for the employment of disabled workers(32).

73. It is important in the context of large employment of labour to make adequate provision for **employment-related injury compensation** (33) and to observe **International Labour Standards** (34). These issues are often overlooked in many donor and NGO funded activities.

Data and Information

74. **Another factor aggravated by the conflict relates to essential data and information required for infrastructure rehabilitation.** In the emergency situation, a good deal of rehabilitation works are carried out without adequate background data and information. "Rehabilitation and maintenance of RFRs has been operating on an *ad hoc* basis dictated mainly by emergency operational conditions and sporadic availability of funds. This has led to poorly planned activities and inefficient utilization of resources. Admittedly, the demand for work to be done very fast precluded systematic planning and programming". This statement on the **Uganda** programme typifies most post-conflict situation(35).

75. "Traffic, and socio-economic data, information on construction, maintenance and vehicle operational costs are not available. Yet this information is necessary for proper planning, programming, budgeting, resource allocation, monitoring and evaluation, specifying appropriate design and maintenance standards, and techniques for rehabilitation and maintenance of RFRs. Efficient implementation of the proposed rural feeder roads rehabilitation and maintenance strategy will depend on availability of proper road inventories and other essential socio-economic data for the roads subsector. There is thus need for setting up such a data base"(36). In **Uganda**, the first phase of this exercise was initiated during 1987-1989.

76. **Time frame. Experience shows that most post-conflict governments and their external partners are in a hurry to rebuild, and move as quickly as possible from emergency relief to rehabilitation to development. In the process, there is a tendency to telescope different stages of programme formulation and implementation, sometimes ignoring some of the many constraints indicated in the preceding paragraphs. Setting unrealistic time-tables is a continuing problem.**

77. What is not sufficiently realized is that while demobilization can be completed within six months, reintegration could take six years or more. Reconstruction and rehabilitation of a conflict-affected economy and society could take one or more decades. What is planned as short-term could last 5-7 years before completion. **The scale and phasing of infrastructure reconstruction and rehabilitation programmes should, therefore, be based on realistic timeframes.**

78. The accompanying table attempts to depict the intensity of different factors noted above in "normal" and "post-conflict" situation. Undoubtedly, the situation may vary widely among and across "normal" and "post-conflict" countries but the trend towards greater difficulties is unmistakable(37). **The table, thus, provides a checklist of items which should be taken into account at the planning and project formulation stage.**

Implementation Issues

79. These factors will also affect programme implementation. However, there are additional issues which need to be considered in that context. These can be grouped into two broad categories: **Partners and institutions, and modalities.**

80. **Partners and institutions.** For the recipient, the number of **external partners** can be very large in the infrastructure sector. For example, in almost all conflict-affected countries, there are as many as **8 multilateral agencies** involved in funding, supporting or implementing infrastructure related activities in different ways: UNHCR, UNICEF, WFP, World Bank, IFAD, UNDP, FAO, ILO. In addition, there are **more than 12 major bilateral donors**, regional organizations, a very large number of international NGOs, and consulting firms.

81. The number of **internal partners and institutions** is also large. Among these are several government agencies involved in the infrastructure sectors, local NGOs and other institutions, and the private sector. **Among the most important partners are the local communities and beneficiaries; however, they are often regarded as victims and not consulted in the planning of infrastructure rehabilitation programmes.**

82. **Coordination** of a wide range of programmes and partners, even in the rural roads rehabilitation part, becomes a difficult exercise in the post-conflict environment. The early development of an overall policy and strategy goes a long way towards rationalisation of different initiatives, proposals and projects, and fitting them into the priority national framework. **Uganda** has developed such a framework.

83. **Linkages** need to be established among the different projects and programmes. This is important for several reasons: to monitor the spatial coverage of individual projects; to promote complementarity -- especially between road rehabilitation and other investments in agriculture, education, health and housing; to reconcile technical approaches; to avoid disparities in benefits e.g. wage payments,food aid, work-standards; to undertake joint capacity building; to pool together

data and information and contribute to central data bank; and to share and pool the experience of working in a post-conflict environment.

Table 2: Factor-intensity in "Normal" and Post-conflict Situation

No.	Factor	Normal	Post-conflict	Remarks
1.	Inaccessibility	*	***	paragraph 58
2.	Insecurity	nil	***	paragraph 59
3.	Landmines	nil	***	Uneven intensity in different countries; paragraphs 60-62
4.	Conditions in the area	*	***	paragraph 63
5.	Target selection	*	***	paragraph 64
6.	Investment Capital availability	*	**	In relation to needs the situation deteriorates; paragraph 65
7.	Wage Costs	*	***	Capacity of national budget to meet wage/ recurrent costs; paragraph 66
8.	Institutional Capacity	*	***	paragraphs 67-71
9.	Labour Availability	*	**	Affected by targeting decision; paragraph 72
10.	Data and Info.	*	***	paragraphs 74-75
11.	Time frame	*	***	paragraphs 76-77

Note: * Good to fair; ** Satisfactory to difficult; *** Very difficult.

VI. Lessons of Experience and Operational Conclusions

84. It is possible to draw a series of conclusions flowing from the country reports and the foregoing analysis.

General Conclusions

85. Employment-intensive public works programmes in countries like Cambodia, Mozambique and Uganda need to be seen in a **conflict-specific focus**. This requires them to take into account several additional factors, such as those indicated in Table 2. In the context of widespread and serious damage to infrastructure, employment-intensive public works programmes can make a significant contribution to rehabilitation and reconstruction of infrastructure, to large scale generation of employment and income opportunities and to capacity building efforts. However, the experience of many small programmes carried out by NGOs suggests that small and isolated investments in social projects involving labour-intensive approaches in poor communities are extremely difficult to sustain in the light of conflict-specific factors.

86. Employment-intensive public works programmes must be seen within the larger framework of post-conflict reconstruction where stimulating economic activity and creating employment are among the important objectives. **The benefits of such programmes can be accelerated if complementary investments are also made for the areas and populations covered by the programmes. However, there are limits to the expansion of these programmes. These are set by the availability and flow of investment capital and recurrent costs, institutional capacity, the capacity of beneficiary communities and availability of labour.** These factors are aggravated in the post-conflict environment.

87. **Although the technical feasibility and economic viability of employment-intensive public works programmes has been well established** in a variety of settings and in many countries, including conflict-affected countries, **it remains important to demonstrate this in every project. This requires emphasis on four aspects: high technical standards in engineering works, high impact in terms of employment creation, competitive costs, and rapid capacity building.** In a post-conflict environment, where there are many projects in the infrastructure sector, these factors can contribute to high visibility and a multiplier effect.

88. The ILO-supported projects provide a great deal of useful experience in this regard. **There is, thus, ample scope for conflict-affected countries to learn from each other's experience. The promotion of technical cooperation among developing countries (TCDC) on this theme could be an important contribution of the ILO.**

Important factors for planning and design

89. It appears desirable to allow for more time for project identification and formulation to look at a variety of conflict-related and conflict-aggravated factors. This could be done through a preparatory assistance phase. Questions of inaccessibility, insecurity, landmines, lack of data and information on engineering as well as socio-economic aspects could be examined during this phase and adequate provision included in the design of the project. **The work of the project would need to be linked with the mine clearance programme. Road surveys and inventories may need to**

be built into the project's activities. This would require the examination of existing surveys and reports, data collected, for example, by the feeder roads department or unit, data collected by other on-going projects, and may require definite inputs into a central national data bank.

90. **Flexibility in design would be an important consideration in infrastructure rehabilitation projects.** This should respond to rapidly changing needs, such as, rapid demobilization or resumption of hostilities in some areas, influx of refugees or returnees or large movements of internally displaced persons. Flexibility should also be influenced by local circumstances. These include inadequate local capacities, difficulties of organization and procedure (e.g. delays in flow of funds, delays in wage payments, in approval of food aid, in custom clearance of equipment etc.). Such factors should be taken into account in programme or project design and safeguards provided. **A good section on risks should be included in the design.**

Implementation factors

91. **The most important factor affecting implementation is capacity: capacity of central units, provincial units, or district-level units dealing with the programme.** This is manifested in several forms of which shortage of qualified and experienced staff is only one. Shortage of middle-level engineering and managerial personnel, especially technicians, supervisors, foremen, quantity surveyors and accountants could be serious for employment-intensive projects. Shortages could be aggravated by rapid turnover especially if there are a large number of operational and planned infrastructure projects around the same time. Sometimes, separate project implementation or management units are established for large projects, and this could drain away good staff from planning and engineering jobs. Absence of counterparts would not only affect project implementation but also affect capacity building.

92. **This points to the need for an adequate training plan which can be prepared in advance and can be started early in project implementation.** Collection of training material, development of training methodology and organization of training are familiar aspects of the ILO's programmes in many countries. The adaptation of this material to suit the specific conditions of the conflict-affected country should be done, if possible, during the preparatory assistance phase. Wide dissemination of this material can influence other infrastructure programmes and projects and thus contribute to capacity building in them as well.

93. **One aspects of capacity is coordination. Often in a post-conflict environment,government structures may not have fully settled down in the emerging system. Thus, real coordination may be missing although formal mechanisms have been created.** Apart from reviewing the progress of programmes and reconciling inter-agency differences, coordination in infrastructure programmes should include reconciling differences in the quality of work, cost-effectiveness, in benefits to the workers, and in quality of community participation.

94. **The next cluster of implementation factors relates to selection criteria, priorities and targeting.** Selection criteria could include extent of damage, importance of access, concentration of target population (demobilized combatants, returnees, internally displaced persons), availability of local government institutions, participatory potential of the local community, availability of labour, linkages with parallel economic and social activities etc. It is always difficult to determine priority provinces (Cambodia) or priority districts (Mozambique) because of the combination of factors mentioned above. Within these, the selection of priority roads may prove to be still more difficult. Targeting of beneficiary populations presents various problems as shown in sections III

and IV because of differences in perceptions, funding arrangements and responsibilities within the government. **Experience from the three countries shows that it is difficult to target demobilized combatants exclusively in employment-intensive public works programmes because of the mix of conflict-affected population in priority districts. However, if the districts containing large concentrations of demobilized combatants and their dependents are selected, it is possible to cover them in significant numbers. Exceptional cases are those where the donor funds are exclusively or mainly directed to demobilized combatants (Uganda). However, many difficulties in targeting can be anticipated and to some extent be overcome by flexible design of projects and programmes.**

95. **Change in counterpart agency could also affect implementation. This is especially the case where, soon after conflict, temporary or special structures are created** to look after different types of programmes or target groups,or responsibilities among government agencies are reallocated. In **Mozambique**, the Commission for Reintegration of Demobilized Soldiers (CORE) was created for a fixed period. In **Uganda**, the Veteran's Assistance Board (UVAB) has been established by law for a limited duration of time. In **Cambodia**, the responsibility for the construction, rehabilitation and maintenance of rural roads is likely to be shifted from the Department of Roads and Bridges to the Secretariat for Rural Development.

96. **Very careful attention should be given in infrastructure rehabilitation projects to the beneficiary community.** This requires, in the post-conflict environment, an assessment of the state of the community, its capacity to cooperate and participate and provide labour. Its cohesion, leadership and decision-making structures should be assessed. Besides the psychosocial aspects, the level of poverty, unemployment, as well as the share of women-headed households and the proportion of disabled people needs to be looked at. The usual shortcomings in involving the community should be avoided; these often take the form of informing the community of the decision to select its area or a particular road, or of formally consulting it. The greater the involvement of the community in planning, selection, and implementation, the more are the chances of good follow-up maintenance.

97. **Among the many elements which require special attention during implementation** are: voluntary recruitment of labour, avoiding disparities in benefits, setting adequate remuneration systems and wage payment mechanisms including timely payment, maintaining the right proportion between cash wages and food aid, arrangements for measurement of works completed, a careful task or output based system, technical standards for rehabilitation and maintenance, standardization of procedures, contract agreements and forms, and careful monitoring of numbers employed, outputs achieved, costs, and benefits (vehicle traffic, impact of cash incomes, increase in trade, establishment of small craftsmen's shops and small business). **Special arrangements may be required for women workers and the disabled. If the training of small contractors is included, this could involve besides training, assistance in developing appropriate contracting procedures, assuring timely cash flow and initial help in credit and equipment.**

98. **Environmental concerns are important where access is being reestablished or facilitated in the rural areas.** Among common problems are: storage of oil and fuel and the avoidance of spillage and leakage; regeneration of borrow pits; risk of deforestation and extension of cultivation to new areas affecting both flora and fauna; damage to wetlands and natural waterflows etc. Environmental impact assessments and routine environmental monitoring may be required in some areas.

99. **An assessment of risks, of replicability and sustainability is important** in all projects, but is specially important in employment-intensive public works programmes in the post-conflict environment.

100. An illustrative checklist of items which need attention at the planning, design and implementation stages in the "normal" and "post-conflict" situations is given in Table 3. This should be read with Table 2.

101. **ILO Role.** The total task in reconstruction, rehabilitation and maintenance of rural infrastructure is too large in post-conflict situations. The number of countries affected by and coming out of conflict has increased significantly. Many donors, NGOs, multilateral agencies and consulting firms are involved in the sector and the variety of its programmes. The ILO share in infrastructure construction, rehabilitation and maintenance is likely to grow in response to the growing need. The impact of ILO programmes can be enhanced through a number of measures indicated below:

(i) contribution to national policy and strategy framework;

(ii) demonstration of technical feasibility, economic viability, cost-competitiveness and speed of employment-intensive technologies;

(iii) increased social impact through better community participation, better targeting to special groups including demobilized combatants and their dependents, returnees, internally displaced persons, women, disabled combatants and civilians;

(iv) increased contribution to capacity building by developing training plans, training material and methodology, assistance in standardization of training packages, and dissemination of information;

(v) designing national standards in rural road rehabilitation and maintenance;

(vi) promoting exchange of information and experience among projects within the country;

(vii) developing linkages with other actors within the sector and especially with parallel investments and activities facilitated by improved access;

(viii) introducing measures relating to worker safety, workers'compensation and respect for basic International Labour Standards;

(ix) promoting improved monitoring arrangements and periodic internal evaluation; <u>and</u>

(x) promoting exchange of experience among countries that face similar problems through TCDC.

Table 3: Comparative Checklist of Items for Planning, Design and Implementation: Normal/Post-Conflict

No.	Checklist Item	Normal	Post-Conflict
I.	Planning		
(1)	Examination of the adequacy of national policy for EIPW	project to assist in policy development	Rapid adoption of an ad-hoc policy
(2)	Integration of EIPW in overall Development Plan	May be adequate	Assist in inclusion in Post-Conflict Strategy
II.	Project Identification		
(3)	Identify responsible government units	Ministry of Public Work/Provincial Office	Several ministries may be involved on on ad-hoc basis
(4)	Capacity of Counter-part Unit	Long-term programme for capacity building	Very limited capacity; help design on-the-job training
(5)	Established system for technical/engineering standards/supervision	Functioning satisfactorily	Need to introduce ad-hoc System
(6)	Needs Assessment:national and provincial level	Adequate data and information available	Ad-hoc rapid surveys of damage
(7)	Inaccessibility of affected area	Good to fair	Very difficult conditions
(8)	Insecurity in the target area	No problem	Very difficult conditions
(9)	Landmines	Nil	Difficult to very difficult situation
(10)	General conditions in the area	Good to fair	Very difficult
(11)	Socioeconomic data and information	Usually available	Not available or inadequate
(12)	Community readiness/ participation/capacity	Good to fair	Unsettled social situation

No.	Checklist Item	Normal	Post-Conflict
(13)	Estimates of labour availability	Can be quickly determined	Difficult to assess
III.	Project Design		
(14)	Project objectives	Employment creation (short and long-term); community participation; capacity building; asset creation through rehabilitation	Improving access; short-term employment creation; some capacity building; improving community involvement where possible
(15)	Participation of beneficiaries in planning/ design	Usually possible	To be promoted where possible
(16)	Criteria for selection of project sites & works	Economic, social	Conflict-related social, economic
(17)	Project-specific data and information	Undertake thorough analysis	Provide for data collection and analysis
(18)	Selection of Project sites/prioritisation	Provincial and national approval	Flexibility needed to change sites depending upon needs/security (see paragraphs 61, 94)
(19)	Engineering specifications	Laid down in advance	Minimum standards to be specified
(20)	Employment to be created	Reliable estimates	Minimum targets to be met should be specified
(21)	Training component	Long-term training plan developed and approved by national authorities	Short-term training to be emphasized at the beginning; orientation training; contribute to long term plan

No.	Checklist Item	Normal	Post-Conflict
(22)	Institutional framework	Well-established counterpart units-national/provincial	Ad-hoc arrangements may be required
(23)	Financing	Both external and local funds assured	Both flow of funds and procedures may be a problem
(24)	Financial procedures/ Disbursement system	Satisfactory	
IV.	Implementation		
(25)	Linkages with other programmes in the area	Usually good linkages exist	Linkages must be established with e.g. mine clearance, complementary investments, NGO programmes etc.
(26)	Implementation partners	Central and provincial staff	Shortage of technical and supervisory staff
(27)	Training plan	Phased implementation	Early implementation
(28)	Coordination	Established mechanisms	Difficult to manage
(29)	Targeting of beneficiaries	Population in the selected area	Conflict-affected groups; specific targeting may be required by different donors
(30)	Labour supply	Normal recruitment practices	Need to stress voluntary recruitment
(31)	Wages, flow of funds and disbursement system	Normal system applies	Anticipate difficulties, provide for special measures
(32)	Maintaining technical standards, supervision and control	Responsibility of government staff	Staff shortages, hence need special arrangements

No.	Checklist Item	Normal	Post-Conflict
(33)	Environmental concerns	Routine environmental monitoring	Special environmental monitoring
(34)	Private sector participation	Training of local contractors	Training of local contractors to be encouraged
(35)	Maintenance of completed works	Responsibility of Government/Local Authority/Community	Special efforts required to ensure maintenance

Endnotes

(1) The country experience is based on three reports and other related documentation which was consulted for the purpose. The three reports are: S. Guha-Cambodia, Country Report and Case Studies, ILO, December 1994; S Guha-Uganda, Country Report and Case Studies, ILO December 1994; and Jean Mayer-Mozambique Country Report, ILO, January 1995. Information presented in these reports includes ILO experience in designing and implementing employment-intensive public works programmes as well as experience of NGOs and donors.

(2) UNDP: Human Development Report, 1994, pages 130-131.

(3) UNDP: Report of the UNDP Cambodia Infrastructure Survey Mission, 29 March-21 April 1990 and 18 June-15 July 1990, Phnom Penh, 1991.

(4) World Bank: Mozambique -- Roads and Coastal Shipping Projects, (ROCS I and ROCS II), Staff Appraisal Reports, 1992 and 1994.

(5) Uganda: Strategy for Rural Feeder Roads Rehabilitation and Maintenance, Ministry of Local Government, March 1992.

(6) S.Guha: Cambodia, op.cit., page 2; and National Programme to Rehabilitate and Develop Cambodia, The Royal Government of Cambodia, February 1994, page 30.

(7) Jean Mayer: Mozambique Country Report, op.cit.; USAID: Mozambique Rural Access Project, Project Identification Document, July 1994, page 2; and ILO: Draft Project Document, Feeder Roads Rehabilitation and Maintenance Programme, Mozambique, Phase II, October 1994.

(8) Uganda: Strategy for Rural Feeder Roads Rehabilitation, op.cit., page (i).

(9) National Programme to Rehabilitate and Develop Cambodia, op. cit., Summary of Proposed Investment Projects, Annex III, page iii.

(10) ILO: Draft Project Document, op.cit., Annex I, Financial Support for FRP Phase II.

(11) Uganda: Strategy for Rural Feeder Roads Rehabilitation, op.cit., pages 43-44.

(12) For a more detailed discussion of these aspects, see J. Gaude and H. Watzlawick: Employment Creation and Poverty Alleviation through Labour-intensive Public Works in Least Developed Countries, International Labour Review, Vol. 131 (1), 1992.

(13) The summary in this and following paragraphs on Cambodia is taken from S. Guha, op.cit.

(14) Asian Development Bank: Rural Infrastructure Improvement Project, TA No. 2059-CAM, May 1994; and Rural Infrastructure, Policy Option Paper No.8, in Agricultural Development options Review Project, Phase II, Final Report, October 1994.

(15) UNDP: CARERE ADP Strategy (CMB/92/006), Cambodia Reintegration and Resettlement Programme (1994-96), December 1993; and S. Guha: Cambodia, op.cit., Case Study 1, pages 23-25.

(16) S. Guha: Cambodia, ibid., pages 18-20. The Directory of Humanitarian Assistance in Cambodia, Cooperation Committee for Cambodia (Phnom Penh, January 1994) lists 125 NGOs and their programmes; of these 16 NGOs have significant interest in rural infrastructure rehabilitation.

(17) World Bank: Mozambique Roads and Coastal Shipping Project II, Staff Appraisal Report, 1994.

(18) UNDP: Mozambique Feeder Roads Programme, Report of the Joint UNDP/SIDA/ILO/MOZ Evaluation Mission, 29 April 1994. The summary description of Mozambique experience is based on several documents including Jean Mayer: Mozambique Country Report op.cit.; UNDP/ILO: Management Assistance to Labour Based Feeder Roads Rehabilitation and Maintenance Programme (FRP), Phase II, Draft Project Document, October 1994.

(19) Important among these are UK/ODA: Feeder Roads Project in Zambezia Province (for rehabilitating 840 km in 4 districts) due to start in 1995; UNHCR-funded project for rehabilitating 267 km in various provinces; Germany: 838 km in Tete and 1,049 km in Manica. In addition, 12 NGOs are involved in road repair in six provinces. Among these are CARE (Zambezia province), OXFAM and IBIS (Niassa province), Save the Children (Zambezia province) using labour-intensive methods. This information is based on UNOHAC: Consolidated Humanitarian Assistance Programme for 1994, May 1994, pages 26-27.

(20) This and the following paragraphs on Uganda are based on S. Guha: Uganda, op.cit., pages 20-31.

(21) Uganda: Strategy for Rural Feeder Roads Rehabilitation and Maintenance, op.cit., pages 32-33.

(22) von Braun, Joachim; Teklu, Tesfaye and Webb, Patrick: Labour-intensive public works for food security in Africa, International Labour Review, Vol. 131 (1), pages 19-33.

(23) S. Guha: Cambodia, op.cit., page 7.

(24) UNOHAC: Workshop on Reintegration Programmes for Demobilized Soldiers in Mozambique (13-14 October 1994), Maputo, 1994, Annex 6.

(25) United Nations: Assistance in Mine Clearance, Report of the Secretary-General, Document A/49/357, 6 September 1994, page 6, paragraph 16.

(26) Human Rights Watch and Physicians for Human Rights: Landmines -- A Deadly Legacy, New York 1993; chapter 6 - Country Case Studies of the Landmines Problem; pages 165-183 for Cambodia and pages 204-215 for Mozambique.

(27) The cost of clearance of landmines is extremely high. In 1993, the international community allocated approximately $70 million to clear roughly 100,000 mines; United Nations: Assistance in Mine Clearance, op.cit., paragraph 19.

(28) Burki, S.J.; Davies, D.G.: Hook, R.H. and Thomas, J.W.: Public Works Programmes in Developing Countries: A Comparative Analysis, World Bank Staff Working Paper No.224, 1976.

(29) S. Guha: Cambodia, op.cit., page 41.

(30) Uganda: Strategy for Rural Feeder Roads Rehabilitation and Maintenance, Annex IV, and paragraphs 3.14-3.16.

(31) Jean Mayer: Mozambique Country Report, op.cit., paragraph 19.

(32) ILO: Guidelines for Employing Disabled Workers on Road, Irrigation and Agricultural Works, Project CMB/92/008, July 1994.

(33) ILO: Draft Guidelines for Employment Injury Coverage for Local Workers, Project CMB/92/008, November 1993.

(34) S. Guha: Cambodia, op.cit., Annex 6.

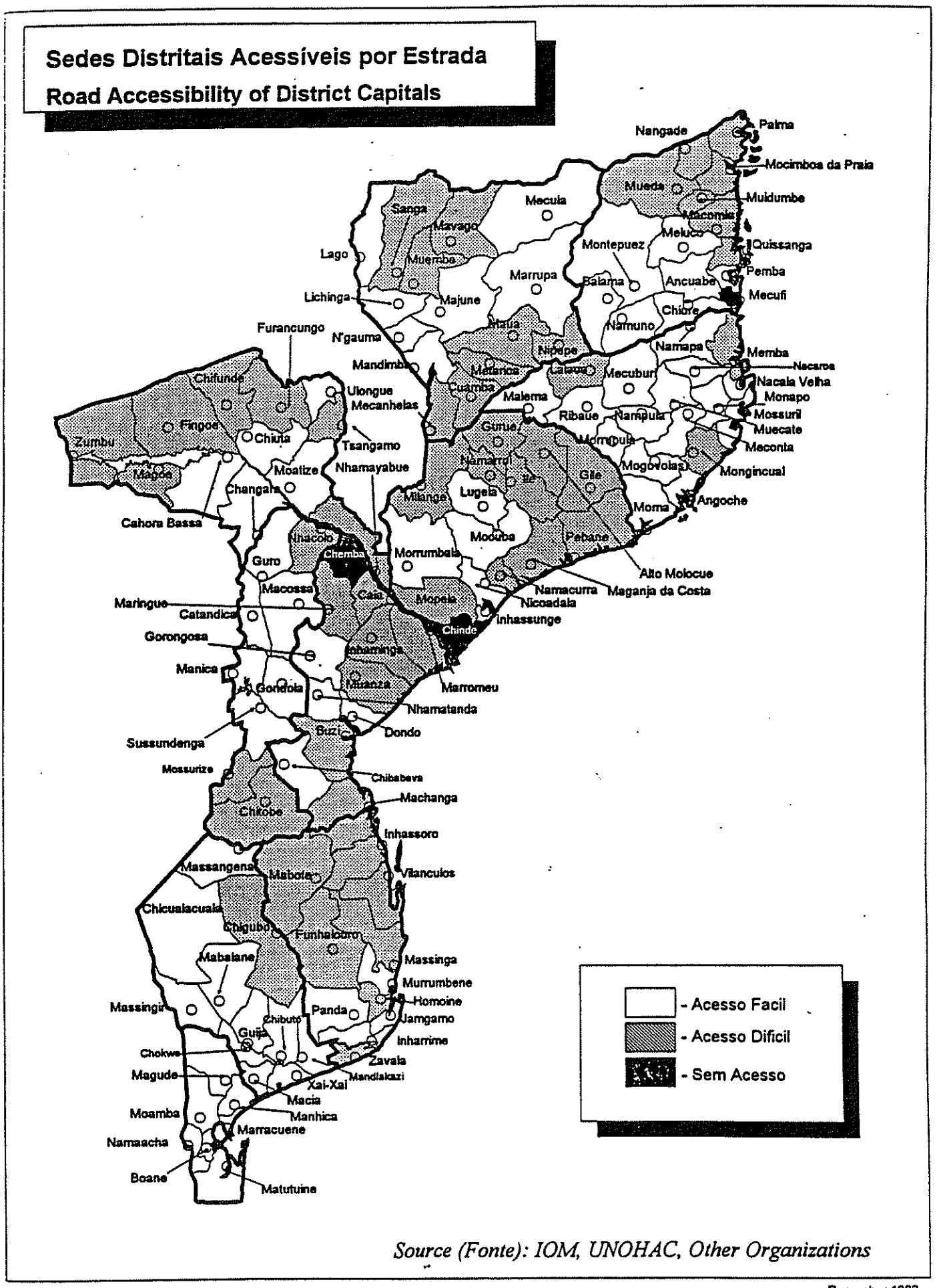
(35) Uganda: Strategy for Rural Feeder Roads Rehabilitation and Maintenance, op.cit., paragraph 3.20.

(36) Ibid: paragraph 3.21.

(37) S. Guha: Cambodia, op.cit., pages 43-44 also briefly discusses the differences between operating in a "normal" situation and a "post-conflict" one.

List of Annexes

Annex 1.1

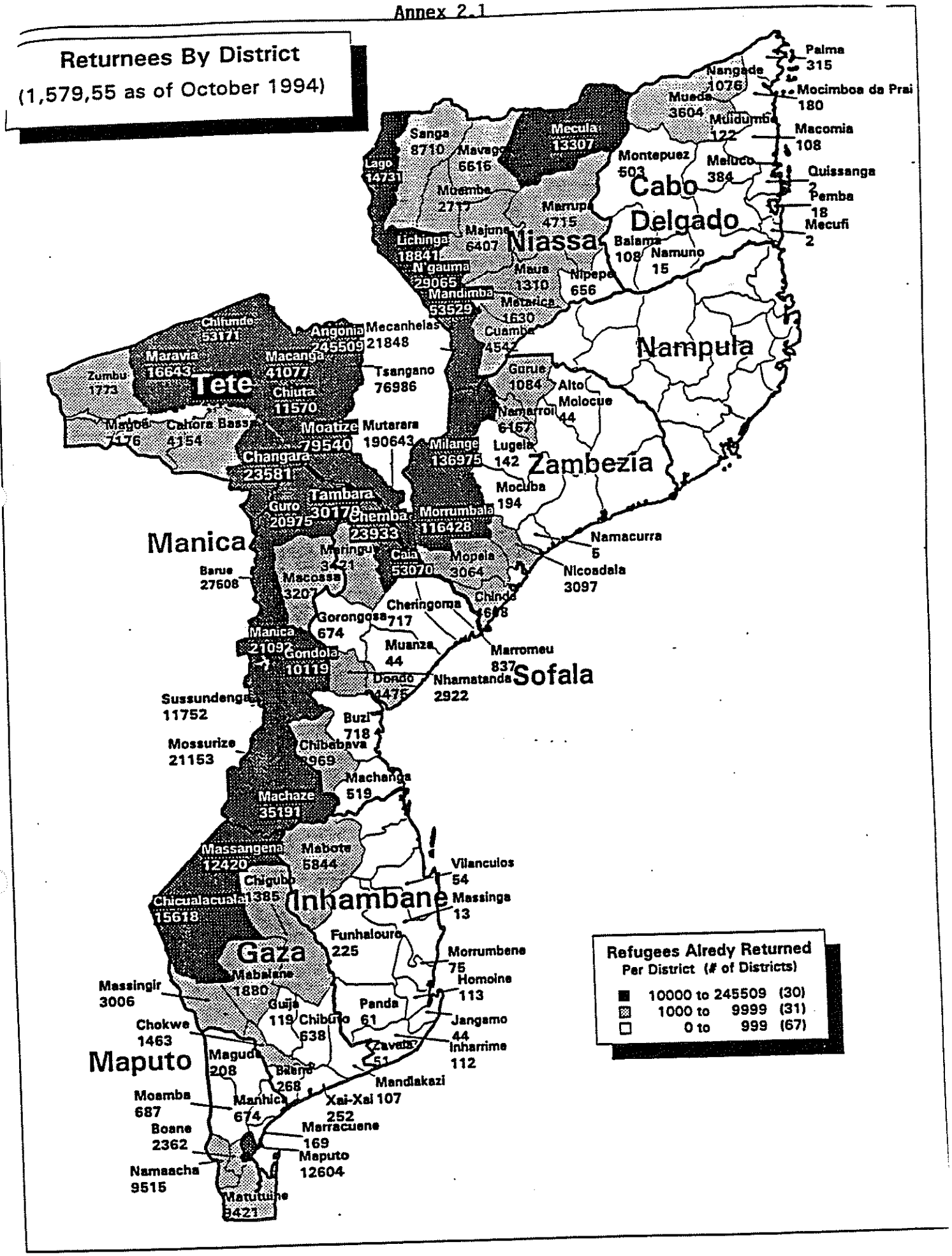


Source (Fonte): IOM, UNOHAC, Other Organizations

United Nations Office for Humanitarian Assistance Coordinatoion

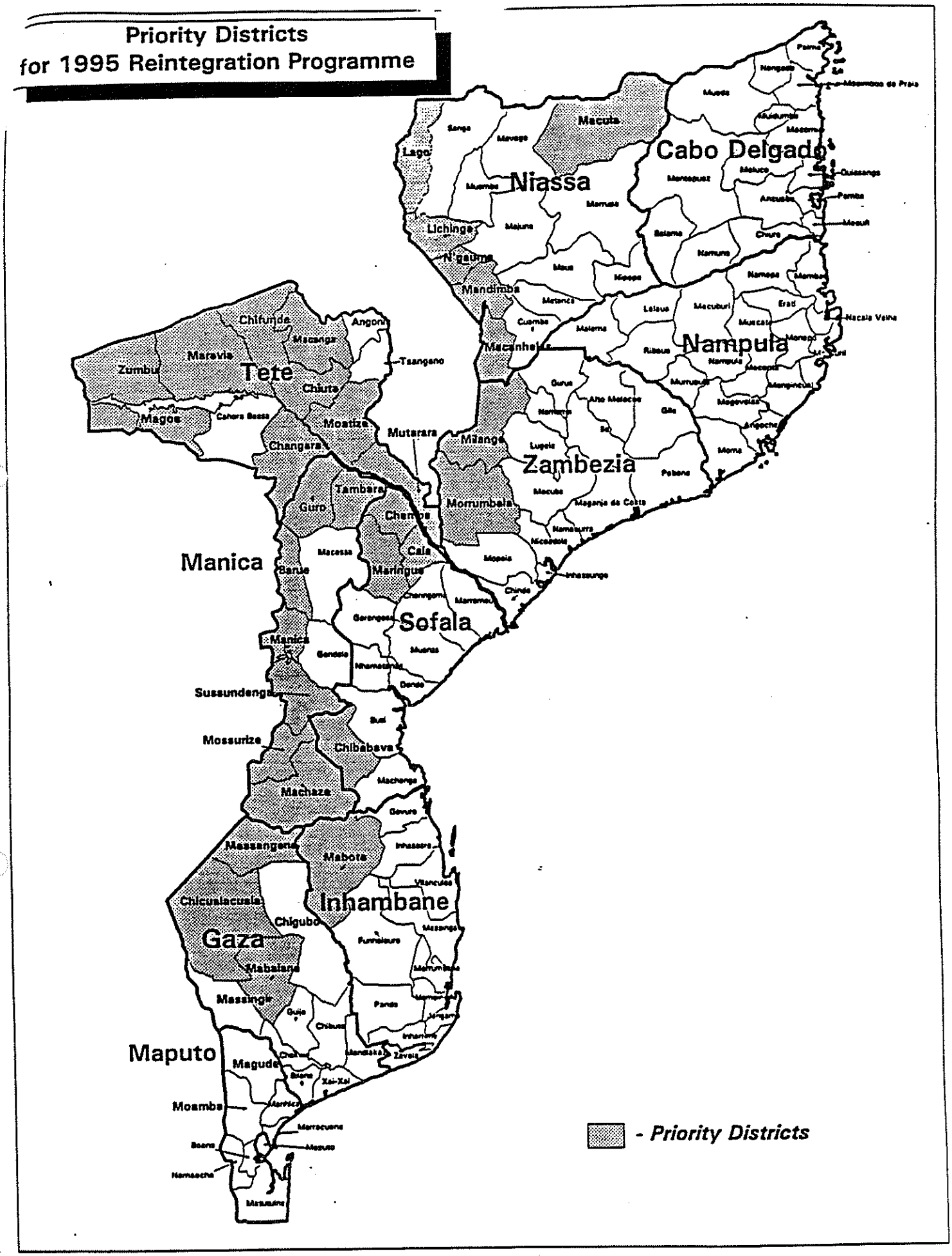
December 1993

Annex 2.1



United Nations High Commissioner for Refugees

Annex 2.2



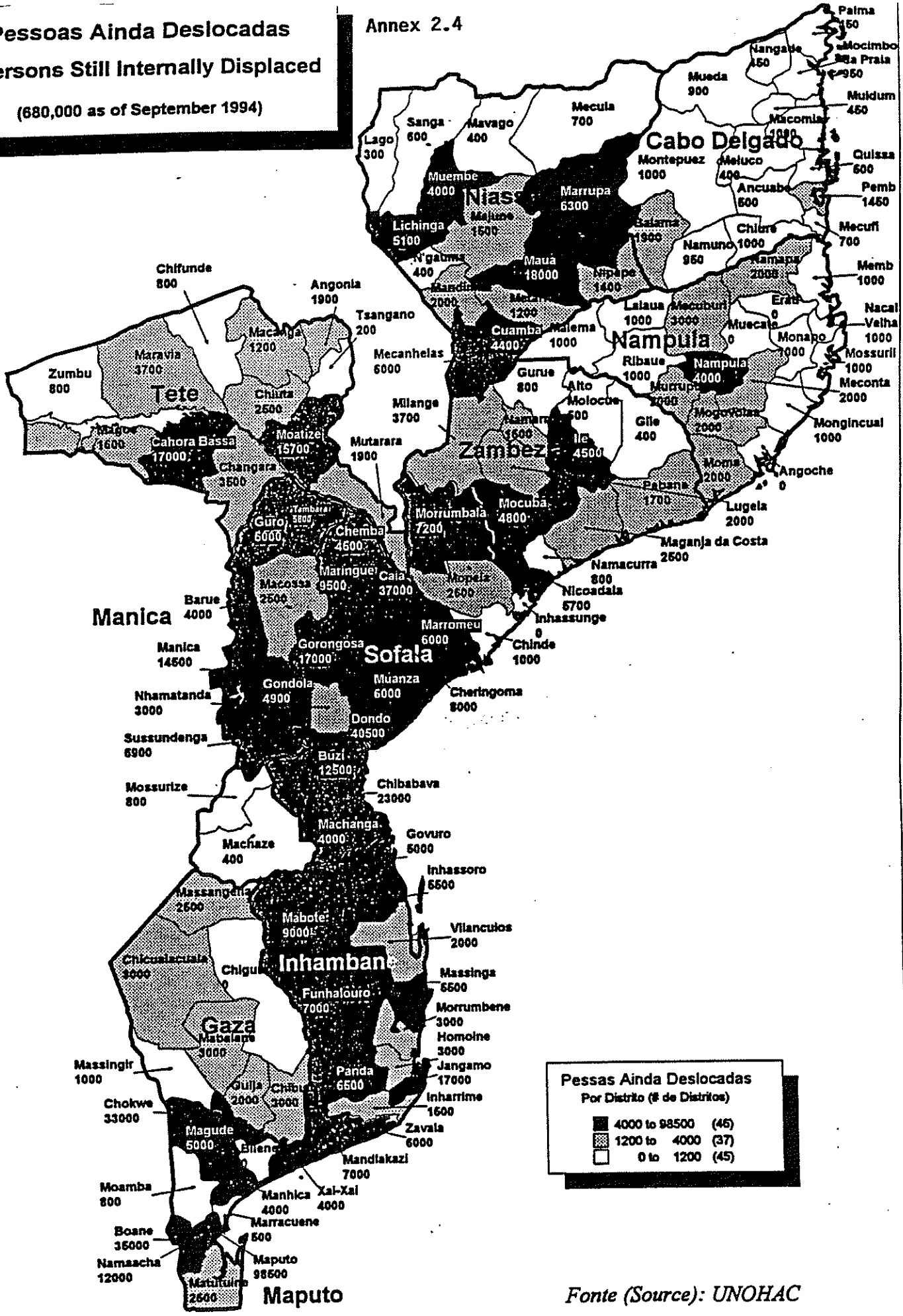
United Nations High Commissioner for Refugees

Pessoas Ainda Deslocadas

Persons Still Internally Displaced

(680,000 as of September 1994)

Annex 2.4

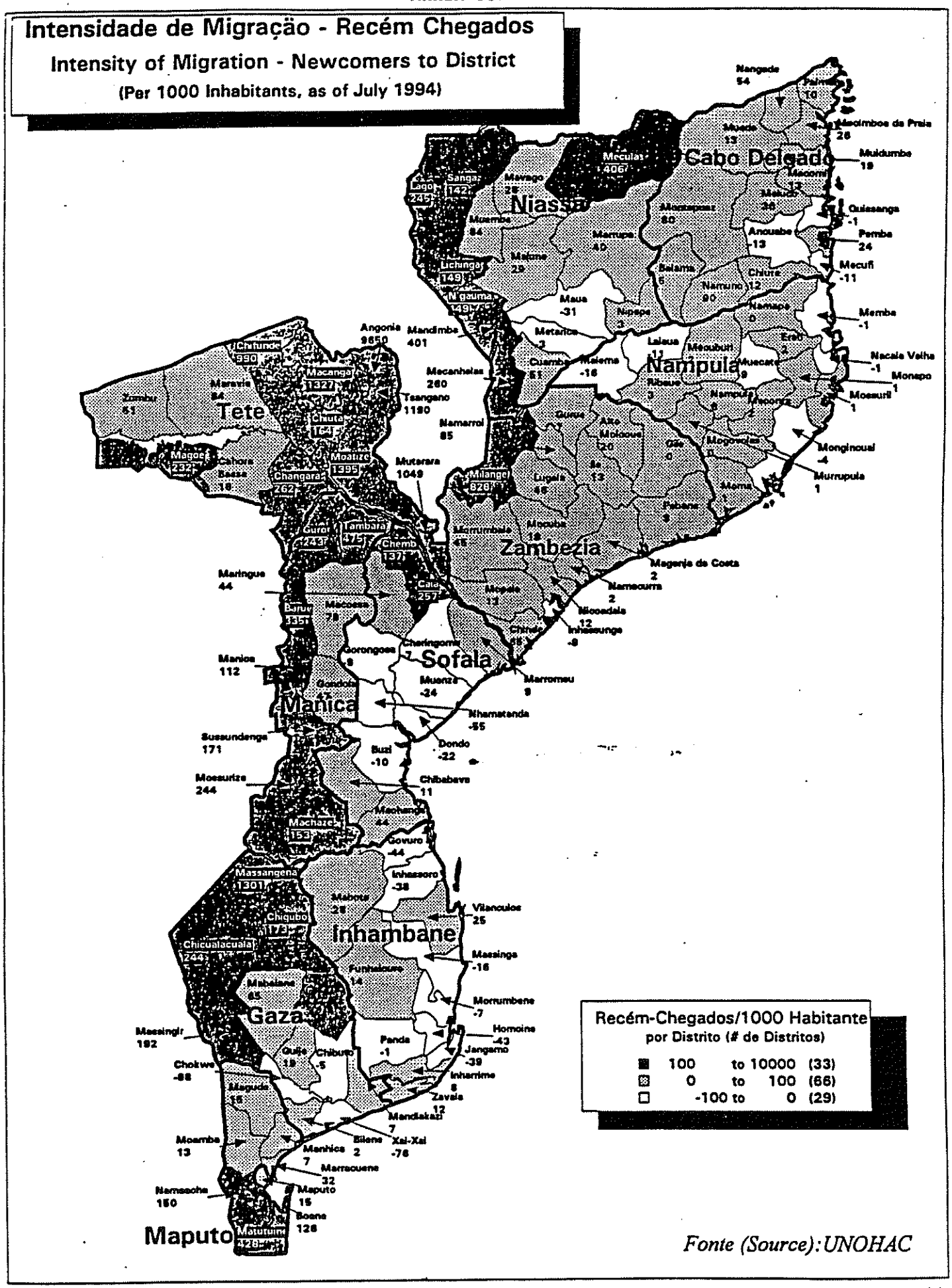


Fonte (Source): UNOHAC

United Nations Office for Humanitarian Assistance Coordination

September 1994

Annex 3.1



United Nations Office for Humanitarian Assistence Coordination

July 1994