



UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL



Distr. LIMITED

E/ECA/HUS/50
November 1990

ENGLISH
Original: FRENCH

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

Sixth meeting of the Joint
Intergovernmental Regional
Committee on Human Settlements
and Environment

Addis Ababa, Ethiopia, 4-8 March 1991

REPORT TO THE JOINT INTERGOVERNMENTAL REGIONAL
COMMITTEE ON HUMAN SETTLEMENTS AND ENVIRONMENT ON
SELECTED MEASURES CONDUCTIVE TO ACCELERATED
SUSTAINABLE RURAL TRANSFORMATION IN THE
AFRICAN REGION

I. INTRODUCTION

The origin and evolution of rural development in Africa

1. The question of rural development in Africa was very quickly perceived as being complex, and reflection on the matter focused on the definition of the concept and its objectives as well as the most effective organizational means for attaining those objectives.

2. The initial endeavours to this end marked the beginning of rural development in Africa and particularly made clear to contemporary generations the actual nature of the links between the rural areas and cities.

3. In fact, it became obvious that the process of urban modernization and the establishment of the infrastructure needed for colonial exploitation had plunged the rural areas into a deterioration that had deprived rural communities in Africa of their original vitality and promoted the steady decline of the traditional rural civilization.

4. This frightening reality was accompanied among African politicians, management and experts by a wave of ideas and intentions that led to a massive movement of solidarity against the despotism that had reigned in the rural areas up to then and promoted a new approach to the rural question, aimed at identifying the role and demands of the rural communities in economic and social development in Africa.

5. The definition adopted in this regard of the concept of rural development and the objectives laid down for its attainment underscore the level of change expected, namely the achievement of a positive evolution of the lifestyle and production of the rural people and an improvement of their living conditions through a series of qualitative and quantitative transformations.

6. To lay down the theoretical basis for this concept, a series of meetings, both regional and international, were organized during the early years. Among these, the Regional Conference on a Rural Development Policy in Africa, held in Moshi in 1969 remains the watershed in the history of rural development in Africa.

7. This conference was preceded in 1966 by the Conference on Education, Employment and Rural Development organized in Kericho and many other expert meetings held in Accra, Libreville and Kenya.

8. Moreover, pursuant to resolutions of the United Nations General Assembly (Resolution 1674 of 1961) and the Economic and Social Council (Resolution 903 of 1962), ECA organized an expert meeting in 1963 and sent an evaluation mission to Ghana in the same

year and a second mission to Cameroon in 1966, thus enabling joint study and harmonization of the viewpoints of member States and institutions.

9. It should be mentioned in this connection that the meeting organized by ECA in 1968 of the FAO/ILO/UNESCO/UNICEF/WFP Inter-Agency Committee served as a basis for the preparation of the IBRD document "Guidelines and Strategy for concerted rural development in Africa".

10. The changing perspectives in the outlook on the rural areas was accompanied by the emergence at the level of formulation of specific terminology such as community development, rural leadership programmes, and integrated rural development and at the level of implementation by the planning and implementation of specific national projects.

11. This new phenomenon led to a general consensus on rural development as the only alternative to people-centred and lasting development.

12. However, while the principle of integrated rural development is today a reality in Africa, the fact remains that the strategy to be implemented, in general, and measures likely to accelerate rural transformation are still highly relevant.

Destruction of rural areas in Africa

13. The history of rural Africa has been marked by a spontaneous integration of human settlements into their ecological space and more recently by the disintegration brought about by colonial aggression and aggravated by unfavourable geo-climatical conditions.

14. The formation and dynamics of rural settlements in the major geographic regions of Africa demonstrate a resourcefulness and ability to adapt to geo-morphological conditions, particularly in the choice of location, with the mode of land use always being dictated by the search for security and optimum food production.

15. The agro-pastoral civilization of the Sudano-Sahelian region and the tradition of trading along the major Rivers Niger and Senegal have promoted the formation at the regional and consequently at the village level of densely populated areas with crowded settlements located on defendable sites selected in accordance with the extent of cultivated agricultural lands, the size of livestock and available grazing land.

16. The climatic conditions in the Sudan region with the peculiar irregular rainfall and poor soils are the cause of the formation of scattered settlements.

17. In the forest areas of Africa, the concern of each ethnic group to control land and the creation of test zones for shrubs around community land have served as veritable land use strategies; food crop plantations were cultivated around the tracks linking the various hamlets arranged in a linear fashion.
18. The history of rural Africa also shows that this situation of equilibrium has been disrupted by factors relating to political, economic and geographic changes.
19. The introduction of administrative reforms, the cash crop economy and the establishment of the infrastructure necessary for colonial exploitation, particularly in rural areas or in major towns, has brought about the dismantling of traditional structures. Even the relatively less-affected peripheral areas have suffered the consequences of the re-organization of services and the establishment of control infrastructure.
20. After acceding to independence, African political authorities still did not draw on their national socio-cultural and economic values, but rather modified the political environment, sometimes promoting confrontation and antagonism between the rural sector and the urban sector.
21. At the regional level, the new dynamics of rural settlements has been characterized by an increasing attraction for communication routes and urban life, with villages repeatedly changing locations in a linear fashion along access roads, thus destroying the structure of village communities, promoting massive rural exodus and the breaking up of families.
22. This situation, has combined with the effects of climatic conditions promoting drought, desertification, scarcity of fuelwood and declining food production to reduce the "green African countryside" to a "no man's land" that is difficult to live in, unproductive and unsafe.

Current situation in the rural areas

23. The situation at present is one in which development activities are concentrated in the urban areas or in less than 10 per cent of the territory of African countries and the fruits of development unequally distributed to the detriment of the rural people who account for more than 60 per cent of the total population.
24. Moreover, the transfer and exploitation of raw materials, particularly for the industrial and infrastructural development of urban areas has led to serious regional disparities characterized by steady depopulation and impoverishment of the rural areas.

25. Forced by poverty and lack of land to flee the rural areas or attracted by the mirage of a new life to be gained from salaried employment, participation in the monetary economy and satisfaction of Western-style needs, large numbers of peasants have been flocking to the cities and to the mining administrative and/or industrial centres, for about half a century now.

26. Thus, rural exodus in particular has reversed trends in population distribution in Africa and stimulated urban growth since the beginning of the century. During this period, the population of the five largest cities in Africa has increased three and half times or, even in some cases, fivefold.

27. However, the impact of urbanization in most of the African countries cannot be uniform, since the population pressure varies from country to country depending on levels of population, urban organization and land use.

28. It is obvious all the same that negative transformation of the rural areas is the lot of the majority of African countries. This is characterized by:

(a) Attraction of the active population away from the rural areas and a decline in agricultural production;

(b) A yawning gap between living conditions in urban areas and rural areas.

29. Consideration of the health situation and availability of basic infrastructure and services show that the rural areas are poorly equipped. The prevalence of waterborne diseases is a matter of very serious concern because of their mortality and morbidity effects, which are among the primary causes of disease and of the decline in production.

30. Moreover, while in education considerable progress has been made in the conditions of schooling of rural youth, problems particularly overcrowding in the schools need to be substantially addressed.

31. Drinking water supply to rural people is an area where urgent action is needed. This is because Africa has the least drinking water facilities in the world, with a rate of water consumption of only 15 to 35 litres per day per capita as compared to 70 to 90 litres per day per capita for South-east Asia.

32. Only 30 per cent of the rural population in Africa have drinking water as against 60 per cent in urban areas with only 40 per of the total population having drinking water supply as against the international figure of 52 per cent.

33. Drinking water supply has to date gone mostly to the urban areas, where according to a study undertaken in 1983, 50 per cent of the population in 30 out of 41 countries had drinking water. According to the same study, only five countries out of 41 had managed to provide the same level of services for the rural population.

34. The results expected from the establishment of manual hydraulic pumps because of their cost and easy functioning had been limited because of various problems including lack of spare parts, proliferation of patents as well as manufacturing faults and maintenance difficulties.

35. The situation regarding solid waste disposal and sanitation installations in general is worse. Only 18 per cent of the rural population (as against 55 per cent in urban areas) have such facilities.

36. Human and financial investments in the establishment of the communication and transport routes for opening up isolated or land-locked regions as well as rural electrification remain inadequate in spite of the programmes carried out or under way in countries such as Kenya, Zimbabwe, the Niger and Tanzania.

37. It is in the context of this extremely worrying situation that the recent United Nations Programme of Action for Africa's Economic Recovery and Development identified the establishment of rural infrastructure as one of the support sectors for agriculture and rural development and recommended intensifying the establishment of such infrastructure.

Government policies and rural development experiences

38. The reaction of Africans to the steady deterioration of the rural areas has been generally characterized by the lack of a clear philosophy on both the kind of social structure to develop and the ways and means of building such a structure.

39. However, some of the efforts made by the States in implementing their development plans as instruments of economic and social promotion, have led to the definition of doctrines and actions that have proved worthwhile.

40. The socialist philosophy of Tanzania perceived the transformation of the rural society as an essential aspect of national progress. The Ujamaa or villagization concept was developed as a form of socio-economic organization and a "synthesis of traditional cultural values". This definition served as the basis for the preparation of the economic and social development plan of the country from 1969 to 1974.

41. Other approaches have also been tried, among them the agricultural co-operatives in Senegal, the production units in Tunisia and the Niger, self-management in Nigeria and the agrarian and women's co-operatives in other countries.

42. Other experiences with liberal undertones have also been carried out in countries such as Morocco and Kenya. These have been based on increased private sector investment and aimed at the institution of agrarian capitalism that would bring about advancement through generalization of its effects among rural people.

43. Similar to these various ideological approaches, rural policies initiated in African countries have also promoted the creation of administrative and/or technical structures responsible for initiating activities that are increasingly rural-oriented.

44. These activities have consisted, for the most part, either in delimiting zones in the rural areas for organizing community services or in developing new zones, especially within the framework of development or equipment programmes, in conjunction with the regrouping and/or transfer of the people.

45. In the countries concerned, such operations have been carried out by specialized bodies or such societies as the Société des terres neuves in Senegal, the Office du Niger in Mali and the Autorité pour l'aménagement de la région du Sud-Ouest in Cote d'Ivoire.

46. The implementation of such operations has often been preceded by feasibility studies on geo-hydrological, demographic, pedological factors, etc. with a view to designing a master plan for the organization of the collective infrastructure development works to be followed by the construction of the settlement.

47. Moreover, the operations often comprised the organization of various forms of assistance for the people until the first harvest.

48. The difficulties observed in the execution of these operations have related mainly to the choice of test zones and the ability to integrate migrant population in their new resettlement areas in terms of the socio-economic habits of the families concerned.

49. Nevertheless, in spite of the poor results obtained, it is obvious that efforts made in carrying out these operations have made it possible, for some decades now, to experiment with sectoral studies and to accumulate a substantial amount of information which serves as the background and basis for new approaches to the challenges and issues posed by the situation of the rural people.

Challenges and issues at stake

50. The main challenge is that posed by the urban areas. Studies of the World Conference on Development and Environment define the challenge that the developing countries should meet in order to promote their rural areas and to stem the tide of rural exodus, in addition to solving a fundamental urban crisis in which 40 per cent of the population would be concentrated in small agglomerations, cities or mega-cities by the end of the century.

51. The report of the Commission notes in this regard that in the same way that the destiny of an urban area depends on the role that it plays in the domestic or international urban fabric, that of the rural area depends on its agriculture, forest, mining industries, etc. on which the urban areas depend.

52. The extent of urbanization during recent decades in the major development poles in Africa has led to a doubling of the rural population within a span of 60 years, while the urban population has increased tenfold during the same period.

53. The population of sub-Saharan African cities such as Nairobi, Nouakchott, Lusaka, Lagos and Kinshasa increased sevenfold in only 30 years from 1950 to 1980.

54. Such a rate of urban growth was made possible particularly by net immigration arising from rural exodus. Should this continue up to the year 2000, Third World cities will have over three-quarters of a billion inhabitants, making it imperative for the States and urban institutions to expand their social infrastructure establishment and management capacity by 65 per cent, at a time of unfavourable economic situation characterized by reduction of resources and increasing demand.

55. Another challenge is that posed by the various aspects of environmental protection, particularly preservation of the ecosystem and control of the desertification that is currently affecting nearly 85 per cent of the people.

56. Lastly, there is also a technological challenge in the sense that to increase productivity in the various branches of economic activity, advanced technology should be adopted and adapted and traditional technologies developed.

57. The challenges posed by the stagnation or deterioration of the living conditions of rural people have been described in an ECA study entitled: Beyond recovery: ECA-revised perspectives, 1988-2008.

58. The question of population and the repercussions of urban population growth (3.1 per cent as against 2 per cent in the developed countries) will worsen the regional disparities as far as employment, food requirements and state of social infrastructure are concerned, and trigger social strife and political and economic instability in the coming decades.

Conclusion

59. The issue of development for improving rural living conditions, raised nearly 30 years ago, has gradually become one of the priority issues in the discussions of regional institutions. The evaluation of the United Nations Programme of Action for Africa's Economic Recovery and Development presented to the 14th Meeting of the ECA Conference of Ministers in April 1988 revealed that African Governments had been promoting the development of their rural areas.

60. These initial achievements in rural promotion have been attained on the basis of a realistic assessment of the challenges that have undermined widespread mobilization the States.

61. Many programmes had thus been launched in an attitude of expectation although with no less strong conviction. These have been accompanied by concrete action through which all the various experiences had been drawn on in an effort to find the most efficient means of attaining quick and low-cost solutions.

62. It should be mentioned in this regard that although the situation is still critical, in terms of the precarious living conditions in rural areas, African States are today united and determined in their search for the tools and measures likely to stimulate and accelerate rural development in the region.

63. It is precisely in such a situation that the following measures can bring about success and maximum impact.

II. PRIORITY ACTIONS

64. The formulation and implementation of a land development policy should seek to bring about regional balance through economic and territorial planning of the appropriate investments. This should focus on the decentralization of decision-making and management of development projects on the basis of multi-sectoral programmes aimed at the development of the economic potential of rural areas and raising of the level of infrastructure in rural settlements.

65. The best way of achieving this is to reduce urban growth in the major economic poles and to develop rural agglomerations through locating activities and infrastructure in land-locked or backward regions.

66. The initiation or finalization of the division of countries into manageable administrative units should be based on evaluation of the economic potential and existing infrastructural situation so as to promote complementarity between the various territorial units, on the one hand, and autonomous creation of resources, on the other.

67. The establishment or strengthening of decentralized management structures, such as local communities, village associations and community organizations should be a major objective in the rural development process.

68. Locating technical services in the territorial units will make it possible to develop advisory-assistance for the aforementioned management structures and promote the identification of rural programmes suited to local conditions and based on comparative evaluation of projects and feasibility and impact studies.

69. Launching an aerial coverage operation over the entire territory or over priority zones is a necessary basis for implementing rural settlement development programmes dealing either with the restructuring of existing centres with the development of infrastructure or the establishment of new agglomerations from existing clusters of settlements or new sites.

70. In this connection, the study of development plans at the local level should aim at organizing rural amenities around activity centres having transport and communication links and facilities for agricultural production, storage and marketing.

71. Strengthening of the economic and technological base is a vital in the process of transforming rural conditions. This entails mostly the establishment of an apparatus for the production of goods and services, for increasing agricultural production and for creating employment through priority investments in the private sector, agro-industry processing and in building materials.

72. Recommendations on the primary sector

(a) The potential of traditional agriculture should be developed simultaneously with investments in the modern agricultural sector;

(b) The use of arable land should be restructured and plots of land given to as many workers as possible on individual or collective basis. The land should be divided up in accordance with

the pedological characteristics, expected sepecutation and the human and material resources allocated for their exploitation;

(c) New lands should be developed for expanding agricultural production within the framework of planned operations, governed by regulation. Such operations will cover priority areas identified on the basis of guidelines of rural development plans. They could also serve as the mobilization and organizational framework for the inactive population in general and the youth in particular;

(d) Plots of land meant for food crop production within the periphery of urban and rural establishments as well as those adjoining family dwellings and which form part of the public domain should be protected. The mobilization of such plots for urbanization purposes and the modalities for their transfer between public or private agents should be subject to specific regulations and legal provisions. State departments and local communities will be responsible for ensuring strict application of these regulations.

(e) The activities of young farmers and agricultural associations should be supported through:

- (i) Establishment of credit schemes for promoting agriculture;
- (ii) Provision of equipment and selected seeds;
- (iii) Popularization of appropriate technologies that do not require costly capital equipment;
- (iv) Organization of a storage and marketing circuit;
- (v) Establishment of local institutions responsible for defending the interest of farmers and motivating them to produce more.

(f) Construction of small water supply schemes and reservoirs together with the implementation of a desertification control and plant cover protection programme.

73. Measures for promoting industrial activities:

(a) Industries for processing, packaging and conservation of agricultural produce locally should be established in the rural areas in view of their immediate multiplier effects;

(b) Support should be given to the formulation and organization of economic interest groups that will establish processing units;

(c) Concessional fiscal measures should be instituted for productive investment in goods and services in rural areas;

(d) Small scale private entrepreneurs operating in rural areas should be informed and educated on the methods of preparing, programming and managing economic projects;

(e) Small- and medium-scale enterprises should be specialized in sub-contracting from the large production units located in the industrial or urban centres.

74. The promotion of local building material manufacturing plants requires relatively smaller investments because of the low energy consuming technologies involved and the use of locally available raw materials. Such installations are, however, labour intensive and can contribute to employment creation and the development of social infrastructure.

75. Actions required to this end are:

(a) Promotion of the training of private entrepreneurs in the technology and management of local building materials production plants;

(b) Institution of credit schemes for acquisition of the land and equipment necessary for carrying out rural projects;

(c) Generalization of the use of local materials in implementing rural construction programmes.

Development of appropriate rural technology

76. The appeal launched in the Lagos Plan of Action by ECA for member States to devote one per cent of their GDP to the development of more effective production methods and improvement of traditional technologies has remained a dead letter up to now, whereas current development trends and prospects of the African economy make technological development an imperative.

77. One promising sector in which adequate investments have not been made up to now is the development and popularization of appropriate technologies for rural areas.

78. Yet research work on technology transfer to the rural areas has identified a number of potential areas including:

(a) Post-harvest technologies for preserving and marketing agricultural produce;

(b) Water, sanitation and irrigation systems;

- (c) Exploitation of renewable sources of energy;
- (d) The biogas system for domestic lighting, refrigeration and fish preservation;
- (e) Solar energy for heating and cooking;
- (f) The use of vegetable waste in fire fighting, roofing and for manufacturing cheap cooking utensils;
- (g) Increasing the use of local building materials in low-cost housing projects.

79. Recommendations are:

- (a) The use of new technologies should be promoted and traditional technologies improved, particularly those relating to renewable energy resources and local materials;
- (b) The capacity of rural research institutions should be strengthened and their finding applied more widely to specific projects;
- (c) Investments for the procurement of equipment and new technologies should be matched to rural infrastructure and the technological level of local users.

Strengthening the financing capacity of rural programmes

80. Financing determines the possibility of carrying out rural development programmes. As such, measures should be instituted to increase financial resources and structures and decentralized procedures established for implementation locally of the said programmes.

81. Action needed to this end are:

- (a) To allocate more resources to the implementation of rural development programmes within the framework of a more balanced distribution of GDP between the urban economy and rural infrastructural requirements;
- (b) To establish a national fund for financing rural development programmes and diversify the sources of financing for replenishing the fund (State budget, social security and other forms of insurance, local communities, enterprises, development companies, economic interest groups, private savings, etc.);
- (c) To promote investment in rural areas through concessional fiscal measures;

(d) To promote rural savings and access to credit for implementing rural development projects and programmes;

(e) To decentralize decision-making on public investments for financing rural programmes at the level of local communities;

(f) To introduce autonomy in the functioning and management of organizations operating in rural areas by enacting appropriate legislation.

Rural employment policy

82. Rural exodus involves, young unemployed or underemployed youth migrating from the rural areas to urban agglomerations. In 1984 out of 102.2 million youth aged between 14 and 25 years, 64 per cent lived in the rural areas, looking for some form of training or paid employment or as heads of family.

83. This situation has led many African countries in recent years to develop special programmes for the youth, involving mainly literacy courses and the acquisition of basic technical skills.

84. Looking at the results of these programmes, it is evident that there is the need to go beyond the current approach and to integrate youth programmes into local and national development programmes and plans for employment creation.

85. Recommendations in this regard are:

(a) The current situation and future trends in employment demand should be assessed through specific studies, surveys and opinion polls;

(b) A national register of local on-going or planned projects should be established, identifying the technical specifications and the intake capacity of each project;

(c) Transitional structures between the period of training rural youth and the time they are engaged in employment should be increased and improved so as to promote quick adaptation and acquisition of know how;

(d) Non-agricultural employment should be created on the basis of existing structures, resources and supervisory facilities, particularly within the context of a rural industrialization policy based on small- and medium-scale enterprises;

(e) Support structures should be established and credit schemes adapted to provide trained rural youth with the basic equipment they require for exercising their trades (regional

guarantee funds for granting loans to the youth, group credit, supervised credit, etc.);

(f) The implementation of economic projects and those for the development of entrepreneurship among rural youth should be promoted through information dissemination and training in management and marketing techniques.

Development of social structure

86. The transformation of conditions in the rural areas is contingent upon the just distribution of the fruits of national development through improved levels of equipment and the development of social infrastructure, particularly housing.

87. The establishment of basic infrastructure and services in the rural areas is generally a welcome subject among the various development planning structures, and the impact of such installations on the improvement of living conditions in rural areas is well known.

88. However, the cumulative achievements in the region in this regard are often dependent on priorities accorded to such installations in development plans, particularly in terms of resource allocations and facilities, more or less similar to what pertains in regard to rural development objectives.

89. The social infrastructure programme aimed at rural transformation should comprise the establishment of water supply, liquid waste disposal, health, education, housing, electrification and road transport systems.

Drinking water

90. The establishment of a drinking water network and/or the inter-connection of sources of supply is one of the fundamental elements in improving health conditions.

91. This objective should, however, be integrated right at the outset into a global approach to the establishment of human settlements that encompasses issues relating to:

(a) The availability, evaluation and modalities for the supply or transfer of water resources;

(b) Assessment of actual needs and demand trends;

(c) Optimal distribution of resources between domestic consumption needs and those for other activities;

(d) Identification of resource conservation and management measures.

92. The drinking water supply programme should focus on:

(a) Coverage of the priority zones defined in the hierarchy of rural centres based on population and in relation to the perspectives of the rural development plan;

(b) Identification of the technological process in accordance with available financial resources and facilities.

93. The criteria to be taken into account in choosing technology are:

(a) The possibility of local production and use of available materials;

(b) The resistance of parts to wear and atmospheric conditions;

(c) Standardization by adapting a limited number of models so as to facilitate maintenance and training of local managers;

(d) Simple maintenance procedures that can be easily applied by the village technicians responsible for the task;

(e) Relatively low purchase price;

(f) Production levels suited to needs so as to avoid wastage of water resources.

Sanitation

94. Whereas sanitary facilities for the disposal of liquid and solid wastes are vital in rural settlements, the availability of such facilities in Africa is very limited, with 18 countries having less than 10 per cent coverage and only 5 countries having a coverage of 50 per cent or slightly more.

95. The sanitation techniques suitable for sparsely-populated rural areas are:

(a) Pit latrines;

(b) Ventilated and improved pit latrines;

(c) Ventilated and improved double pit latrines;

(d) Odourless latrines;

(e) Water closets;

(f) Septic tanks.

96. The shallow sewerage system is another possible technological option particularly for areas with population densities of over 150 inhabitants /ha. Nevertheless, this relatively new system holds much prospects because of the quality of service and low cost, despite the consumption rate of 25 litres/inhabitant/day necessary for its function and maintenance.

97. The establishment of rain water evacuation and solid waste disposal facilities are often neglected in rural settlements. However, they have a major role to play in ensuring the stability of structures, flood prevention, maintenance of roads and the general conditions of hygiene.

98. Recommendations in this regard are as follows:

(a) The public services should conduct development studies and establish basic infrastructure in rural settlements, leaving the responsibility for the management and maintenance of equipment and secondary and tertiary infrastructure to the rural population;

(b) Rain water should be evacuated by means of a network of stabilized earth gutters along the various roads and in accordance with topographical conditions;

(c) A solid waste collection system should be organized at each rural centre and wastes evacuated by animal or mechanical traction to a common dumping site.

Health facilities

99. The measures aimed at improving the health situation in rural areas should be conceived within the context of a comprehensive approach, integrating the problem of infrastructure with those related to food balance, occupational medicine, education, etc.

100. Recommendations in this regard are:

(a) A medium- and long-term policy should be formulated and actively implemented;

(b) Vaccination, preventive, mother and child care campaigns and health inspection services should be increased;

(c) Birth spacing and family planning programmes should be gradually introduced in view of their relationship to the raising of the living standards of family units;

(d) Mobile teams should be sent periodically to conduct vaccination and health care programmes;

(e) Rural health workers should be trained and permanent facilities built to provide emergency care and first aid, taking into account the areas to be covered and conditions of access to these areas.

(f) Rural areas should be provided with a network of health infrastructure comprising facilities capable of providing various levels of health care, in accordance with the hierarchy of rural centres and within the context of the rural development plan for the region concerned (dispensary, health centre, maternity, poly-clinic, hospital, etc.)

101. Education and vocational training are the most effective ways of bringing about long-term transformation and integration of villagers in the national economic and social development process.

102. Action needed in this regarded are:

(a) To establish bigger schools and reduce the number of pupils per class;

(b) To build schools and training institutions nearer housing estates;

(c) To establish vocational training programmes in relation to on-going activities in the area concerned, particularly for dropout youth aged from 8 to 14 years;

(D) To organize literacy and continuing education courses for adults.

103. Road transport is a vital factor in strengthening rural settlements, particularly in opening up remote areas and providing communication links with production zones, local markets and other facilities or services.

Recommendations

104. A road transport plan should be prepared together with the rural development plan and should be based on:

(a) An assessment of current levels of traffic and infrastructure;

(b) Prospects for the development of traffic in the area concerned;

(c) Requirement for communication routes and means of transport for people and goods in areas with heavy rainfall;

(d) The need for roads that are passable all year round, especially during the rainy season;

(e) Definition of technical standards in conformity with road safety regulations while promoting the use of locally available raw materials;

(f) Organization of a hierarchical road transport network round the design of existing or planned national roads, identifying the sections to be implemented in the short-, medium- and long-terms;

(g) Ensuring co-ordination between the road network and plans for the establishment of other networks, namely electricity, telecommunications, etc. in the same region;

(h) Organization of on-the-job training for maintenance, operational, supervisory and management staff who will be involved in projects to be implemented.

(i) Clear identification of the structures responsible for carrying out works, on the one hand, and those responsible for maintenance, on the other, by inacting legislation and instituting modalities for concluding agreements between the various partners.

105. Rural electrification often seems an unattainable objective when the actual possibilities of States are considered. However, it is absolutely vital that any policy for the transformation of rural conditions include the provision of electricity.

106. The formulation and implementation of a rural electrification plan should be based on research into the economical sources of energy and reflect natural resources potential, existing infrastructure and popularization of research findings on renewable energy.

107. The possible technological options for the production of low - cost energy are:

- (a) Solar energy;
- (b) Biogas systems;
- (c) Diesel generators;
- (d) Charcoal plants;
- (e) Hydroelectric power plants.

108. The promotion of housing as part of the land and territorial balance policy promotes the return of rural people to rural areas to settle and also reduces the population densities in the big urban centres.

109. Recommendations

(a) Housing promotion activities should be embarked upon within the framework of the restructuring of existing rural centres or the establishment of new settlements in accordance with the orientations of the development plans for the area concerned;

(b) Development procedures in keeping with national land use objectives should be formulated, taking into account the problems of land diversion and speculation;

(c) Government agents responsible for land acquisition, engineering studies, servicing and transfer of plots for family needs and various activities should be mobilized;

(d) Preferential rates should be established for land acquisition and transfer for families and for rural investments;

(e) A system should be organized for the supply and transportation of building materials to rural areas, particularly to landlocked and mountainous regions.

110. It emerges from the foregoing recommendations that the implementation of social infrastructure programmes should be based on the following criteria:

111. The existence of preliminary studies integrating the orientations of a rural development plan and taking account of:

(a) The identification of settlement sites away from floods and strong winds;

(b) Availability of energy and water resources as well as proximity to production centres;

(c) Designation of areas for the disposal of solid and liquid wastes;

(d) Definition of priorities in the implementation of various equipment programmes, indicating phases to be carried out in the short, medium and long terms.

112. Implementation studies and technical specifications should address the urgent need for low-cost construction, particularly through the maximum use of available materials, the use of local manpower and the possibility of easy maintenance.

113. There should be a possibility of stage-by-stage improvement, substituting one technology for another as more financing becomes available, without management being seriously affected.

114. Participation of local communities and people and the establishment of a management structure make it possible to reduce the cost price of infrastructure by substantial proportions, such as the 30 per cent reduction in the Tanzanian AEP project.

115. The question of standards, in terms of the level of facilities per capita, is a relative concept that needs to be appraised on the basis of the technical and economic conditions in each country and the possibility for improvement within a given period.

116. It is obvious that modest objectives should be set at the initial stages and made more and more ambitious over time, in accordance with prevailing socio-economic conditions.

117. As such, the search for a more equitable distribution of incomes, modern amenities and social advancement facilities among the urban population and the rural masses can now be the first "standard target" that can be pursued by each State.

118. Once this stage has been attained, it can then justifiably constitute a platform for the definition of other objectives such as the application of the standards laid down by international organizations for various sectors such as health, education and housing.

III. COMPLEMENTARY MEASURES

119. These are aimed at the achievement of a conducive environment for implementing activities initiated by the public sector, through training and gradually making locally elected officials aware of their responsibility for greater autonomy in the day-to-day management of rural centres and the generation of resources.

120. Recommendations in this regard are:

(a) Training should be provided to rural development agents responsible for the follow up of the programming and implementation of rural infrastructure and activity projects, together with the technical and administrative services in the sphere of influence;

(b) Action should be initiated to promote women's domestic activities, particularly those relating to :

(i) Fuel and water conservation in the home;

(ii) Household hygiene particularly for children;

(iii) Balanced diet;

(iv) Birth spacing;

(v) Possibility of producing goods and services at home;

(c) The local cultural heritage should be preserved, managed and strengthened through registration of the various cultural groups, conservation of drama pieces, organization of cultural shows locally, support to the production and marketing of handicrafts;

(d) An information system specific to rural areas and dealing with housing, population, employment and infrastructural issues should be developed at the national level;

(e) Teaching materials should be prepared and disseminated to organizations working in rural areas and to village communities and groups;

(f) Seminars should be organized on the situation and possibilities of rural establishments within specific geographic regions or areas;

(g) Institutions specializing in rural settlements should be established at national level.

IV. INTRODUCTION OF REGIONAL AND INTERNATIONAL MEASURES

121. Efforts should be made at regional level:

(a) To institute at the level of regional organizations and in collaboration of member States, the Rural Promotion Decade in Africa;

(b) To strengthen and diversify the sources of financing for greater coverage of rural development programmes and projects;

(c) To increase assistance to member States in the form of missions for the identification, evaluation and follow up of rural development programmes and projects;

(d) To establish an information system specifically for the rural areas in collaboration with member States.

(a) Strengthen the financing capacity for rural development programmes;

(b) Disseminate findings of research on rural technological development to the States.

V. CONCLUSION

123. The current situation of rural settlements in Africa and the economic trends identified are certainly forcing the pace of rural transformation both in terms of time and space.

124. The impact of the measures and actions proposed in regard to macro-economic integration and the immediate effects on local living conditions will depend on the level of investments that each State will be able to make and the issues and priorities that Governments will set out in their respective development plans.

125. It is in this connection that the issue of rural development, that has today been made one of the priorities in the effort for authentic and lasting development, requires greater human and financial investment, particularly as this decade draws to an end.

126. The assessment of the issues at stake and the challenges posed by the current situation has amply shown that only by so doing can Africa restore its self-confidence and strengthen its identity.

127. The various actions and measures for achieving accelerated qualitative and quantitative rural transformation can serve as a strategy for integrated rural development, to the extent that they are adapted to the technical and economic conditions of each State.

128. They also go to show how much the international community should invest to make Africa in the past trampled upon flourish again.

VI. BIBLIOGRAPHY

(a) General documents

- (i) The Economic Commission for Africa: Its origin, development, problems and prospects, by Adebayo Adedeji, United Nations Under-Secretary-General and Executive Secretary of ECA.
- (ii) The Trampling of the Grass: The inaugural Silver Jubilee Lecture of the Economic Commission for Africa, Addis Ababa, 25 April 1985, by Shridath Ramphal, Commonwealth Secretary General.
- (iii) Our Common Future: report of the World Commission on Environment and Development, April 1989.
- (iv) Report of the First African Regional Conference on Environment and Sustainable Development, Kampala, Uganda, 12-16 June 1989.

(b) ECA studies

- (i) Modèles de développement rural intégré par pays, CEA Social Development Division, Integrated Rural Development Unit (1979-81).
- (ii) Impact on rural development of youth employment programmes in the rural areas: ECA/IHSD/SDS/89/1(2.2(1)(a)).
- (iii) Study on policies and programmes in human settlements to accelerate rural transformation and reduce disparities between urban and rural areas in Africa (E/ECA/HUS/38).
- (iv) Infrastructure development for upgrading rural settlements and improving rural living standards (E/ECA/HUS/40).
- (v) Appropriate design and applied technologies for the development of human settlements infrastructure in Africa (E/ECA/HUS/41).
- (vi) Role of small-scale building materials industries in the implementation of human settlements development programmes and rural development projects in the African region (E/ECA/HUS/42).

(c) ECA reports

- (i) Report on activities in the field of human settlements for the 1987-1988 period (E/ECA/HUS/45).
- (ii) Report to the fifth meeting of the Joint Intergovernmental Regional Committee on Human Settlements and Environment, Addis Ababa, 13-17 February 1989, (E/ECA/HUS/ENV/5).

(d) ECA technical publications

- (i) Publication technique sur les méthodes et les techniques des planification pour l'aménagement des établissements ruraux en Afrique: (E/ECA/HUS/36).
- (ii) Thoughts on a human settlements policy in Africa: the land problem in urban areas and housing programmes for the masses (E.ECA/HUS/12).

(e) Experts reports

- (i) Report of the expert group on planning methodologies and techniques for the development of rural settlements. Addis Ababa, 5-9 December 1980 (E/ECA/HUS/49).
- (ii) Report to the expert-group meeting on methodologies and techniques for rural settlement planning, Addis Ababa, 16-20 October 1989.
- (iii) Le rôle de la science et technique dans le monde rural. Rapport de mission en Inde (26 Février - 13 Mars 1986); by A. Haribou, ECA - Natural Resources Division - Science and Technology Section.
- (iv) Report of the joint ARCT/ECA Training Workshop on capacities in the acquisition of foreign technology for Africa 9-13 February, 1987.
- (v) Symposium on technology development and transfer for rural development (Arusha-Tanzania) 27 February 3 March 1989.

(f) International Labour Organisation, JASPA reports - Addis Ababa

- (i) Politique de développement rural en Afrique: impact sur l'emploi et le revenus; cas du Gabon.

- (ii) Eléments pour une stratégie d'emploi dans les zones rurales au Togo.
- (iii) Emploi des jeunes et activités rurales en République Islamique de Mauritanie.
- (iv) Pour une promotion de l'emploi non agricole des jeunes en zone rurale au Rwanda.
- (v) Réflexion pour politique de l'emploi au Zaïre.

(g) Articles

- (i) Women in development of Africa: a view from Mary Tadesse.
- (ii) The roles of women in food and economic development: Kathleen Cloud.
- (iii) African women and small-scale rural industries: Sylvia White.

In Journal: International Journal of Rural Development, Vol.1 No. 1, Fall 1981.