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Report of the Secretary-General

Summary

Programmes and policies implemented to reduce rural poverty have met with varying degrees of success. A large number of rural people in many developing countries still do not have access to basic social services such as health, education, water, sanitation and modern energy sources. Markets remained underdeveloped, and infrastructure development has not kept pace with population growth. Overcoming these challenges will require focusing on programmes that contribute to enhancing the efficiency and productivity of agriculture, tapping the potential of the non-farm sector, enhancing the management of natural resources and improving the quality of rural infrastructure. In addition, providing access to rural finance, local markets, technology, education and other social services will be vital to meet the challenge of sustainable rural development.

* E/CN.17/2008/1.



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I. Introduction

1. The present report presents an updated analysis of the state of implementation of the internationally agreed framework for rural development as contained in chapter 14, “Promoting sustainable agriculture and rural development”, of Agenda 21,¹ the Programme for the Further Implementation of Agenda 21 (General Assembly resolution S-19/2, annex) and the Plan of Implementation of the World Summit on Sustainable Development (“Johannesburg Plan of Implementation”),² and various sessions of the Commission on Sustainable Development.

2. In addition to rural development at its sixteenth session, the Commission will also review the state of implementation of the following thematic clusters: agriculture, land, drought, desertification and overall progress of Africa as a continent. Those topics are interrelated and constitute important elements of the rural development agenda, even more so in the case of Africa. Each thematic cluster will be discussed in a separate report, and cross-references are made herein where necessary. The present report acknowledges that rural development encompasses both agricultural and non-agricultural activities, although the latter has received less attention in rural development programmes.

3. The present report is prepared on the basis of information and data collected or received from (a) national reports on rural development submitted to the secretariat of the Commission, (b) the results of the regional implementation meetings and meetings of the United Nations specialized agencies, such as the International Fund for Agricultural Development (IFAD) and the Food and Agriculture Organization of the United Nations (FAO), and (c) analysis carried out by development banks and relevant major groups.

II. Review of implementation

A. Facts and figures on rural poverty

4. In developing countries, an estimated 1.2 billion people live in extreme poverty. Poverty is highly concentrated in rural areas and will be for many decades to come. If assessed by an international poverty line (\$1 per day), about 75 per cent of the developing world’s poor live in rural areas.³ The world poverty rate fell by 5.5 percentage points between 1993 and 2002 from 27.8 per cent to 22.3 per cent, with 106 million fewer people living in extreme poverty than a decade earlier. It is important to highlight that the aggregate poverty reduction has largely been the result of rural poverty reduction. Therefore, over the same period, the number of poor living on \$1 per day fell by 153 million in rural areas but increased by 47 million in urban areas, in part due to rapid migration from rural to urban areas.

¹ *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992*, vol. I, *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.

² *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

³ See *World Development Report 2008: Agriculture for Development*.

5. Even though the methodology used in the World Bank study defines poverty in terms of household consumption per capita, such a definition is not exhaustive and does not reflect the impact of access to other basic social services. Experience shows that rural poverty stems from different sources, such as limited economic opportunities and lack of access to social services (for example, water and sanitation, health, education), basic assets, markets, information and decision-making.

6. The regional data, as set out in the table below, show a strong differentiation among regions of the developing world in terms of both the urban/rural share of the poor and urban/rural poverty rates. In 2002, rural poverty rates were the highest in South Asia and sub-Saharan Africa at 39 and 51 per cent, respectively, and the absolute number of poor has increased in both regions since 1993.

7. The percentage worldwide of people living on less than \$1 a day in rural areas has declined, mostly from the gains made in China, but still remains extremely high. It fell from 37 per cent in 1993 to 29 per cent in 2002, and it is more than double the urban rate of 13 per cent.

Table 1

Urban and rural poverty measurement using the poverty line of \$1.08 per day in 2002 (up from \$1 per day purchasing power parity in 1993)

Region	Number of poor (millions)		Head count index (percentage)		Urban share of the poor (percentage)	Rural share of the poor (percentage)
	Urban	Rural	Urban	Rural		
East Asia and Pacific	16.27	223.23	2.28	19.83	6.79	93.21
Eastern Europe and Central Asia	2.48	4.94	0.83	2.87	33.40	66.60
Latin America and the Caribbean	38.33	26.60	9.49	21.15	59.03	40.97
Middle East and North Africa	1.21	4.88	0.75	3.82	19.87	80.13
South Asia	125.40	394.34	32.21	39.05	24.13	75.87
Sub-Saharan Africa	98.84	228.77	40.38	50.86	30.17	69.83
Total	282.52	882.77	12.78	29.32	24.24	75.76
Less China	278.52	707.76	16.28	31.72	28.24	71.76

Source: World Development Report 2008.

B. Rural development programmes and policies

8. A large number of countries with predominantly rural economies have implemented wide-ranging policies and programmes, with the main thrust on employment generation and poverty reduction, with varying degrees of success. A review of currently available poverty reduction strategies indicates insufficient focus on rural areas. The proposed strategies are agricultural rather than rural, and the focus of those strategies is more on increasing agricultural productivity than on

reducing rural poverty.⁴ In some cases, provision of social services for livelihoods and natural resources management are hardly touched upon, yet they are critical for the livelihoods of the rural poor.

9. Experience shows that effective approaches towards rural poverty and vulnerability go beyond investments in agriculture and food security. In this regard, some areas that have proven successful in reducing rural poverty include rural infrastructure, natural resource conservation, land reform, water rights, empowerment of women and off-farm employment opportunities. Box 1 highlights some successful examples.

Box 1

Good practices in rural development: some examples

China: rural industrialization, enterprise development, and human resources development are used as mutually supportive components of rural development under which surplus rural labour can embark on enterprise development without leaving their homes in rural areas.

Republic of Korea: combining community organization and empowerment with infrastructure development has visibly contributed to sound lifestyles, thus leading to higher levels of social development.

India: an improved interface between the citizens and the Government in the Dhar district has enabled interaction and dialogue, the formation of new alliances, the development of interpersonal networks and the establishment of cross-sectoral links. Greater access and control over information have resulted in increased empowerment and better governance.

Bangladesh: the benefits of access to information technology are evident from the Village Phone project in Bangladesh, which combines the experience of the Grameen Bank with village-based microenterprises and the latest digital wireless technology to provide modern telecommunication services to the poor.

Pakistan: a central strategy of the Aga Khan Rural Support Programme in Pakistan was to create or strengthen the institutional structure at the village level through which people can determine priority needs and decide how best to manage common resources in the interests of the community as a whole.

Source: <http://www.unescap.org/rural/bestprac/index.htm>.

10. Official development assistance for agriculture and the rural sector has fallen steadily since 1988. Today, only about 8 per cent of bilateral official development assistance goes to rural development. The World Bank's lending to rural areas from

⁴ "Achieving the Millennium Development Goals: Rural investment and enabling policy", panel discussion paper for the twenty-eighth session of the Governing Council of the International Fund for Agricultural Development (IFAD), Rome. See also IFAD poverty portal at <http://www.ruralpovertyportal.org/english/regions/africa/mwi/approaches.htm>.

1999 to 2001 averaged around only \$5 billion per year. That amount represents about 25 per cent of the Bank's total lending and therefore is not congruent with the greater incidence of poverty in rural areas.⁵

11. Despite considerable attention to capacity-building in rural development programmes, substantial gaps remain. Bridging those gaps will be essential to mobilizing and empowering rural communities through training, education, public awareness programmes and technology transfer. Poor and limited rural infrastructure has a profound impact on communication, access to markets and information, and the development of human capacities. Local media, rural radio and new information and communication technologies are critical for raising awareness in rural communities and providing access to information and technical advice.

12. Rural development programmes have gone through a great deal of transformation in their scope and content over the past couple of decades, ranging from addressing food security concerns to a more integrated approach to rural development, including community empowerment and the protection and management of natural resources. Important problems identified during this evolutionary process include (a) limited public sector capacities at the local level, (b) lack of empowerment of rural people in implementing rural development programmes, (c) poor interaction among the actors involved in developing and implementing rural development programmes, (d) heavy reliance on technical assistance and limited attention to local capacity-building needs, (e) insufficient attention to multisectoral and cross-cutting concerns, and (f) national development efforts that are skewed in favour of urban areas, which receive a disproportionate allocation of resources.

1. Agricultural development

13. Agriculture remains the main pillar of poverty reduction in rural areas by providing essential nutrients as well as employment and income-generating opportunities to the rural labour force. For example, the average real income of small farmers in southern India rose by 90 per cent and that of landless labourers by 125 per cent from 1973 to 1984 as the result of the Green Revolution.⁶ Most of the countries that have failed to launch an agricultural revolution have remained trapped in poverty, hunger and economic stagnation. This is especially true for sub-Saharan Africa, in which 16 of the 18 most undernourished countries in the world are located.

⁵ See Csaba Csaki, *Reaching the Rural Poor: A Renewed Strategy for Rural Development*, World Bank 2003.

⁶ *Ibid.*

Box 2

Water-agriculture-poverty linkages

A review of water and poverty linkages in six Asian countries led to the following conclusions: (a) access to agricultural water and irrigation reduces chronic poverty incidence; (b) the impact of irrigation on poverty reduction is highest where landholdings are equitably distributed; (c) effective reduction of rural poverty requires that agricultural water/irrigation development be targeted at poor communities/areas/localities; and (d) unequal land distribution is associated with inequitable distribution of agricultural water benefits.

Source: Hussain et al., *Agricultural Water and Poverty Linkages: Case Studies on Large and Small Systems*, Asian Development Bank 2004.

14. Livestock provides over half of the value of global agricultural output and one third in developing countries. Not only does it contribute to rural livelihoods, employment and poverty relief, but it is also a crucial source of financial capital for the rural poor. For example, in a study of household poverty dynamics in 20 communities in Kenya, researchers found that more than 40 per cent of families that escaped poverty had done so by diversifying their farm income, primarily by acquiring livestock. The institutional context in which the sector operates is changing. Over the past decade, public and private sector roles have become increasingly stratified, with an emphasis on government doing better with less. However, improvements in the physical infrastructure have not been accompanied by the institutional infrastructure.

15. Although countries have launched specific initiatives and programmes aimed at increasing agricultural productivity, the results have been mixed (see E/CN.17/2008/3). For example, in Africa, the Alliance for a Green Revolution in Africa was launched to train agricultural scientists and improve crop varieties, leading to the development and commercialization of several improved crop varieties. Currently, 63 per cent of African countries allocate less than 6 per cent of their national budgets to agriculture, as against the target of 10 per cent or more agreed under the 2003 Maputo Declaration (see A/58/626, annex I). The main thrust of policies in the countries of South Asia has been the enhancement of agricultural productivity and the development of rural physical infrastructure.

16. In Latin America and the Caribbean, several practical and policy initiatives have been put in place to tackle rural poverty through improvement in agricultural practices, focusing on increasing participation of the rural poor, particularly in El Salvador, Guatemala, Honduras and Nicaragua. Among the objectives of such initiatives are to provide information and knowledge to assist in the design of strategies for poverty alleviation and sustainable rural development as well as to provide information and knowledge in order to support innovation in agriculture and food processing to meet increasing competition in local and global markets.⁷

17. A necessary component in meeting the Millennium Development Goals related to poverty and hunger, among others, is a more productive and profitable

⁷ See http://www.ruta.org/temasdeTrabajo_PACA.php?id=2#desarrollandoPolitica.

agricultural sector, but prospects of increasing agricultural productivity are hindered by many factors. They include age-old land tenure systems, poor land quality, subsistence farming practices, lack of access to markets and capital inputs, high transportation costs, highly variable climatic conditions and a scarcity of water. Modern technologies are simply not economic when farmers have to pay three to five times the world price for fertilizer and other chemical inputs.⁸ Increasing the production of food staples is especially challenging for Africa because it has poor rural infrastructure and weak institutions to support agricultural development.

18. Moreover, the evidence suggests that in most developing countries changes or shifts in public policy have not been very conducive towards facilitating producer access to knowledge and production inputs, promoting environmentally sustainable production systems, ensuring public health and food safety standards, and encouraging the development of efficient markets and processing facilities. The economic impact of taxes, subsidies and direct market interventions by Governments has not been that pronounced.

19. Among developing countries, investments in agricultural research and development have slowed down dramatically in the past decade despite the high social return on investment during the same period. While the public expenditure on research and development remained stagnant in developing countries, it has increased almost twofold in developed countries, thus further widening the knowledge gap between poor and wealthy nations.⁹

2. Non-farming activities

20. It has been noted that when agricultural development is complemented by non-farm growth of the rural sector, the impact on reducing rural poverty is more pronounced. In most countries, non-farming activities account for 30 to 50 per cent of income in rural areas.¹⁰ Based on the share of aggregate growth originating in agriculture and the share of aggregate poverty (\$2 per day) in the rural sector, the World Bank classifies countries into three categories: agricultural-based, transforming and urbanized.

21. Agricultural-based economies are found mostly in sub-Saharan Africa. Even in those economies, the growth of agriculture can stimulate demand in domestic industry and services. In transforming economies, mostly in Asia, North Africa and the Middle East, the rural non-farm economy accounts for most of the economic growth. In India and Indonesia, growth in rural services was estimated to have contributed at least as much as growth in agriculture towards reducing poverty. Rural trading and transport, mostly of food, make up about 30 per cent of rural non-farm employment.

22. In urbanized countries with a less predominant rural sector, increasing non-farming activities are not necessarily linked to agriculture. In those countries, found mostly in Eastern Europe and Latin America, agriculture makes up only 6 per cent of the economy. In some Latin American countries, rural non-farming activities grew more than 10 per cent a year from 1980 to 2000. In Chile, they rose from

⁸ Hazell, Peter, "Is agriculture still important for economic development and poverty reduction?" Commentary, International Food Policy Research Institute Forum, September 2005.

⁹ See <http://www.asti.cgiar.org> and *World Development Report 2008: Agriculture for Development*, table 7.1.

¹⁰ *World Development Report 2008: Agriculture for Development*, p. 203.

25 per cent of total rural employment in 1960 to 49 per cent in 2002, and the growth in Brazil was from 14 to 31 per cent during the same period. Although Brazil experienced dramatic growth in the agriculture sector as well, much of the reduction in rural poverty came from income transfers and employment in the rural non-farm economy. This was in caused major part by the introduction of more profitable farming practices (no-tillage farming systems), which at the same time reduced time and labour requirements for small farmers and allowed small family farmers to enter into value adding or other non-farm related economic activities.

3. Access to social services and infrastructure development

*Water and sanitation*¹¹

23. About 84 per cent of the population without access to improved sources of drinking water live in rural areas. Only 39 per cent of the world's rural population have access to any type of improved sanitation facility. Although the deficit is shrinking over time, only 49 per cent of the global rural population will be served in 2015 if the current trends continue, and the relative situation of the rural population in 2015 will still be very unfavourable.

24. Low access to a safe water supply and adequate sanitation is the root cause of many diseases that afflict Africa and is a contributory factor to the high infant and maternal mortality rates in many countries. The World Health Organization (WHO) has reported that approximately 50 per cent of all Africans suffer from one of six water-related diseases.

25. Several initiatives are being implemented to improve access to water and sanitation services and water resources management (see E/CN.17/2008/11). Examples in Africa included the establishment of the African Ministers' Council on Water to promote cooperation for poverty eradication through better water management and the African Water Facility that was launched in 2002, with a focus on capacity-building and policy, institutional and legal reform in the water sector. Water operators' partnerships are being developed and institutionalized in various regions (see box 3).

Box 3

Rural Water Supply and Sanitation Initiative in Africa

Most of Africa's population lives in rural areas (62 per cent), and access to water supplies and sanitation services is lowest in the rural areas, at about 47 per cent for water and 45 per cent for sanitation. To meet the water supply and sanitation challenges, the African Development Bank has established the Rural Water Supply and Sanitation Initiative. The overall goal of the initiative is poverty reduction through the provision of safe water and basic sanitation to 80 per cent of the rural populations in Africa by 2015, with eventual 100 per cent coverage by 2025. The attainment of those targets will require cumulative investments estimated at about \$14.2 billion.

Source: <http://www.afdb.org/portal/>.

¹¹ Much of the access-related statistics reported in this section are taken from the Joint Monitoring Programme report (2006) of the United Nations Children's Fund and the World Health Organization.

26. Key challenges for the provision of effective and sustainable water and sanitation services in rural areas include: (a) decentralizing management to the lowest appropriate level; (b) engaging rural communities in the planning, financing, implementation and operation of water supply schemes; (c) making the provision of water and sanitation services an integral part of rural development strategies; (d) ensuring the availability of funds and capacities to keep rural water supply systems viable and functional; and (e) scaling up of successful experiences. Increased financing is clearly needed, but it will be effective only if supported by community capacity to ensure the sustainability of investments.

Rural energy

27. At present, 2.5 billion people rely on traditional fuels, such as wood, dung and agricultural residues, to meet their heating and cooking needs. Although 800 million people in developing countries have been connected to power grids in the past 20 years, 1.6 billion people, mostly in rural areas, still do not have access to electricity.¹² Policy frameworks by and large remain deficient in addressing the challenges of energy, particularly with regard to providing access to affordable modern energy services for cooking and heating, including energy in rural development plans.

28. In most cases, subsidies have been targeting consumption rather than promoting access. On top of this, subsidies for electricity consumption tend to benefit rich people more than the poor. Addressing those challenges requires establishing methods, structures and capacities at the local level to attract investments in energy services and mobilizing resources for investment in rural energy and development.

Health services

29. Rural people in developing countries have long suffered from a variety of water- and insect-borne diseases, which have reduced their capacity for productive work and thus diminished their chances of escaping from poverty. The past decade has seen growing inequalities in access to health care. On the one hand, private hospitals with state-of-the-art facilities cater to the elite in urban centres, sometimes with government subsidies. On the other hand, the majority of the poor, especially in rural areas, are left to market forces, and medical expenditure is the second highest cause of rural indebtedness.

30. Progress has been made in reducing the incidence of diseases such as schistosomiasis, while others, such as malaria, tuberculosis and HIV/AIDS, still constitute major threats in rural areas. The prevalence of HIV/AIDS, in sub-Saharan Africa in particular, has reduced the number of adults able to support their families and the broader rural economy. Malaria aggravates rural poverty because of the costs of treatment and of lost work time. The Governments of some poor countries have doubled expenditure on health and education since 2000 but still cannot afford to pay adequate salaries.¹³ The experience of a number of countries shows that mass recruitment drives help in overcoming the shortage of staff in the short run (see box 4).

¹² *World Energy Outlook 2006*, International Energy Agency.

¹³ "Paying for people: financing the skilled workers needed to deliver health and education services for all", Oxfam policy paper, April 2007.

Box 4

Scaling up of rural health services

Pakistan: “Lady Health Workers”. In 1994, Pakistan established a programme to expand family planning and primary care services. There are now some 80,000 “Lady Health Workers” who provide basic health services and perform data monitoring for nearly 70 per cent of the population. This has extended public health services and some maternal health services to many thousands of people in rural areas who otherwise would have none.

Thailand: recruitment for rural populations. Between 1979 and 2000, the Government of Thailand launched a series of reforms in the health sector to combat the inequitable distribution of health personnel across the country. Every time the reforms were introduced, they led either to a brain drain from the public sector to the private sector or the reverse of this trend back in favour of the public health system, depending upon the nature of the reforms and incentives provided therein.

Islamic Republic of Iran: *comprehensive training and health-system development:* Since 1985, rural health workers in the Islamic Republic of Iran are selected from local populations and trained locally. The result is that access has rapidly expanded in all areas, key health indicators have improved significantly and reliance on foreign medical workers has disappeared entirely after the number of locally trained physicians increased by a factor of five. The system has achieved almost universal vaccination coverage and reduced the under-five mortality rate from 70 deaths to 33 per 1,000 in the period of 15 years.

Source: “Paying for people: financing the skilled workers needed to deliver health and education services for all”, Oxfam policy paper, April 2007.

31. The major constraint to training and recruiting health professionals is the lack of funding for strong public systems. Overall, the 2001 report of WHO to the Commission on Macroeconomics and Health proposed a \$34 per capita expenditure on health systems to provide basic, universal health services, compared with existing levels of between \$13 and \$21. To overcome funding constraints, the African Union heads of State met in Abuja in 2002 and pledged to increase government investment in health, working towards a target of 15 per cent of the total government budget. Admittedly this is a tall order; only seven countries with shortages of health workers invest 15 per cent or more of government budgets on health.

Rural infrastructure

32. Limited access to infrastructure severely restricts the goods and services which are available to the rural poor, such as electricity, telephones, transport, schools,

health centres, towns and markets.¹⁴ Service gaps in the developing countries are enormous, and the differences in the availability of infrastructure between urban and rural areas are stark.

33. The available statistics show that 46 per cent of households in rural areas had access to electricity, compared with 89 per cent in cities; 12 per cent of households in rural areas had in-house taps, compared with 59 per cent of urban households; and 7 per cent of households in rural areas had sewer connections, compared with 61 per cent of urban households.¹⁵ Very few rural households had telephones — only 8 per cent compared with 38 per cent in urban areas. One positive recent development has been the rapid growth in ownership of cellular phones, which allow farmers to communicate with potential buyers of their produce and to access formal market information services. In some countries, however, Governments still need to encourage access to those technological developments. About 700 million rural people live more than two kilometres from an all-season road. For many, the obstacles presented by inadequate infrastructure make daily living difficult and escaping from poverty seemingly impossible.

34. Poor access to infrastructure continues to place a disproportionate burden on rural women in parts of sub-Saharan Africa, where women spend many hours each day on travel and transport just to meet household subsistence needs. Widely dispersed populations, low volume economic activities and sparse service provision are major challenges to cost-effective rural infrastructure and require significant investments and new approaches, such as transport hubs, in order to be overcome. In developing countries, the lack of road access to markets and limited processing facilities make it difficult for many rural communities to market their produce. Public investment to expand access to rural roads and transport services is critical to reducing transportation costs and transit time to markets.

35. The rural digital divide exists firstly owing to the lack of telecommunications infrastructure and connectivity and secondly owing to economic disparities, with a contributory factor being weaker human capacities to exploit the technologies, with all of these leading to less effective communication and exchange of information in rural areas. In summary, poverty reduction can be hastened if rural roads, irrigation, and rural electrification interventions are made in locations that are pivotal in terms of distributive and multiplier effects favouring the poor.¹⁶

4. Vulnerable groups in rural development

36. In order for rural development policies and programmes to succeed, they should be gender responsive and address gender disparities and the needs of socio-economically disadvantaged groups. By and large, the current trends suggest otherwise. For example, in the case of women, evidence from country case studies suggests that rural women's ownership and control over productive resources and other assets are far below those of men. Similarly, indigenous peoples, who make up about 5 per cent of the world's population, constitute 15 per cent of the world's

¹⁴ Alberto Zezza, Paul Winters et al., "Rural household access to assets and agrarian institutions; a cross country comparison", Food and Agriculture Organization of the United Nations (FAO), 2007.

¹⁵ Ibid.

¹⁶ Ifzal Ali and Ernesto M. Pernia, "Infrastructure and poverty reduction. What is the connection?" Economics and Research Department, Policy Brief Series No. 13, Asian Development Bank, January 2003.

poor,¹⁷ suffering higher rates of landlessness, malnutrition and internal displacement than other members of society, and having lower levels of literacy and less access to health services.¹⁸

37. Rural youth is another important group that is capable of playing an important role in sustainable rural development because over half the global youth live in rural areas of developing countries. In 2004, nearly half the global youth population, between 15 and 24 years of age, were poor and living (as dependants) on less than \$2 a day,¹⁹ while 20 per cent were living in absolute poverty on less than \$1 a day.²⁰ Between 130 and 140 million young people are illiterate, and in sub-Saharan Africa and South Asia more than one in three young people were illiterate in 2002.²¹

38. About 80 per cent of disabled people live in rural areas, and most of them are farmers and rural workers. Programmes that have proven effective in sustaining their livelihoods are those targeted on the development of skills for specialized farming (such as apiculture, sericulture and vermiculture), enterprise development associated with tool manufacture and repair, and food processing.

5. Adapting to climate change

39. Changes in climate can have significant impacts on agricultural productivity, and thus on rural livelihoods. Poor people in rural areas are the most vulnerable to the effects of climate change. Many live on ecologically fragile land and depend upon agriculture, livestock, fisheries and forestry, all of which are resources affected by climate change. If the predicted trends in climate change are confirmed, severe limitations will be imposed on future potential gains from agriculture. Also, climate change threatens to reverse the gains made in the past decades towards food security and poverty alleviation.

40. The impacts of climate change — including more frequent and severe drought and flooding as well as shorter growing seasons — are becoming a source of grave concern to the sustainability of agriculture in many developing countries. This vulnerability is particularly pronounced in dry, drought-prone regions where water is scarce and lands are being degraded. Crop failures and livestock deaths are causing higher economic losses and undermining food security with ever greater frequency, especially in parts of sub-Saharan Africa. Food prices are rising. Crop yields could drop by 50 per cent by 2020 in some countries.²²

41. Although climate change is occurring and will continue to do so, Governments have undertaken little action in terms of preparing response strategies and promoting resilience. This is likely to further exacerbate the living conditions of

¹⁷ See “Indigenous peoples”, IFAD 2007, available at <http://www.ifad.org/english/indigenous/index.htm>.

¹⁸ See “Statistics and key facts about indigenous peoples”, IFAD 2007, available at <http://www.ruralpovertyportal.org/english/topics/indigenous/statistics.htm>.

¹⁹ See Guide to the Implementation of the World Programme of Action for Youth, United Nations Department of Economic and Social Affairs, 2006.

²⁰ World Youth Report 2005: Young People Today and in 2015, United Nations Department of Economic and Social Affairs, 2006.

²¹ Bennell, P., “Knowledge and skills for development, promoting livelihood opportunities for rural youth”, IFAD 2007.

²² Climate Change: a Development Challenge, IFAD Press Release, 2007.

poor rural households and farmers who are dependent upon natural resources and subsistence agriculture. Moreover, limited institutional and financial capacities at decentralized levels to cope with the challenges posed by the climate change affects the rural communities in terms of hunger, poverty and health impacts. Greater inter-agency and intersectoral collaboration and enhanced technical and financial capacities are vital for developing effective adaptation strategies and programmes.

6. Building human capital: education and training

42. Education and training are two of the most powerful weapons in the fight against rural poverty and the promotion of sustainable development in rural areas. Evidence shows that non-attendance in school, early drop out of students, adult illiteracy and gender inequality in education are disproportionately high in rural areas, as is poverty. Urban/rural disparities, in both educational investment and the quality of teaching, are on the rise. By and large, not much progress has been made in terms of linking educational activities to the specific needs of the rural community for skills and capacity development to seize economic opportunities for improving livelihoods and quality of life (see box 5).

43. An initiative on “Education for rural people”²³ was launched during the World Summit on Sustainable Development with the objectives to increase access to basic education for rural people, to improve the quality of basic education in rural areas and to foster national capacity to plan and implement basic education in a way that addresses the learning needs of rural people. This initiative has contributed positively in educating farmers, but the results have been uneven and the progress slow.

Box 5

Education as a rural development strategy

Educational attainment in the rural United States reached a historic high in 2000, with nearly one in six rural adults holding a degree from a four-year college, and more than three in four having a high school diploma. According to a recent study, rural counties with high educational levels saw more rapid earnings and income growth over the past two decades than counties with lower educational levels. However, economic returns to education for rural areas continue to lag behind those for urban areas. Preliminary research also demonstrates a connection between better schools and positive outcomes in terms of earnings and income growth for rural workers and rural communities.

Source: <http://www.ers.usda.gov/AmberWaves/November05/Features/Education.htm>.

44. Educational services in rural areas are severely affected by lack of facilities and schoolteachers. For example, an estimated 1.9 million primary schoolteachers

²³ The initiative was launched during the World Summit on Sustainable Development in 2002 by the United Nations Educational, Scientific and Cultural Organization with a focus on education for rural people within the framework of the Education for All initiative.

are needed globally today,²⁴ and 80 million children of primary school age do not attend, most of them in rural areas. In some parts of sub-Saharan Africa and southern Asia, there is only one third to one quarter of the required number of properly trained teachers. Sub-Saharan Africa will need to increase its current number of 2.4 million teachers by 68 per cent in the coming 10 years in order to reach the target of education for all.

45. In some countries there are also legal obstacles to schooling, such as the lack of a birth certificate in rural areas or the denial of citizenship to certain rural ethnic minorities. Finally, war and conflict, which affect mostly rural areas, disrupt the provision of educational services and impede access and regular school attendance. During the 1990s, in sub-Saharan Africa, numerous armed conflicts and the growing HIV/AIDS pandemic severely disrupted schooling.

C. Natural resources management

46. Sustainable management of natural resources is vital in order to ensure that development potential in rural areas is maintained for the future. About three out of four poor people live in rural areas, where they depend on natural resources for their livelihoods. More than 1.3 billion people depend on fisheries, forests and agriculture for employment, almost half of all jobs worldwide. Research findings describe a great deal of variability in the causes of environmental degradation, ranging from adverse or catastrophic natural events to poor governance and management.

1. Land management

47. The failure to manage land resources in an integrated, holistic manner has led to a number of serious problems and poses barriers to achieving sustainable development. Evidence shows severe degradation of land resources in the form of erosion, desertification, depletion of groundwater, salinization of soils and dumping of toxic mine wastes, and so on. More than 40 million hectares of land are affected globally by salinization and flooding. Moreover, every year 19.5 million hectares of valuable agricultural land is lost to urbanization and industrial use, forcing subsistence farmers onto ever shrinking and more marginal lands.

48. Current land management approaches face a number of barriers to address a multitude of interrelated problems, including deforestation, desertification, air and water pollution, and uncontrolled expansion of human settlements in urban and rural areas (see E/CN.17/2008/5). For example, deforestation in Nepal and the surrounding mountains leads to flooding of the Ganges and other river systems that pass through countries downstream.

49. Barriers also include limited access to appropriate information and technology, weaknesses in institutional infrastructure, unsustainable land-use practices and conflicts between land-use goals.

50. Well defined, secure, and transferable rights to land are crucial to rural development efforts because land tenure security generally contributes to social stability, while tenure insecurity can contribute to social instability and conflict. A number of countries in Africa (Kenya, Mozambique, Zambia), Central and Latin

²⁴ Ibid.

America (Brazil, Mexico), Asia (Cambodia, Philippines) and Eastern Europe and Central Asia (Albania, Armenia, Georgia) have reformed their land laws and land policies over the last 10 years in ways that yield widely shared benefits. In contrast, countries as diverse as Colombia, Zimbabwe and Côte d'Ivoire continue to face the challenge of developing land policies.

2. Water resources management

51. The greater competition for water among extremely diverse users with very different types of water needs has made water management a complex task. The agriculture sector is still by far the largest user of water, but water losses remain high. Global estimates for irrigation efficiency vary, but the average is about 43 per cent. Irrigation efficiencies typically range from 25 to 45 per cent in Asia but up to 50 to 60 per cent in Israel, Japan and parts of China.²⁵

52. Institutional reforms in the water sector worldwide show a similar pattern. Although many Governments have succeeded in passing water laws, it has often taken years to convert them into practice. There are also cases in which countries have passed laws that have had little or no impact. A key aspect of the institutional discussion has been what Governments should or can do; make laws, set up regulatory organizations, turn over irrigation systems and specify property rights. Ways and means to involve water users and influence their behaviour towards water management and conservation have received little attention in the institutional analysis, and thus in the policy frameworks (see E/CN.17/2008/11).

53. Major obstacles to sustainable water resources management include: limited capacities of water management institutions, inadequate mechanisms to facilitate water transfers from agricultural to urban water use in ways that protect the agricultural economy and the associated agricultural values, absence of strategies to deal with the impact of climate change, limited success in operationalizing the principle of "user pays, polluter pays", limited stakeholders consultations, and incompatibility of tariff structures with economic efficiency and social equity objectives. In addition, the lack of training and knowledge of farmers contributes to wasteful water use practices in agriculture.

3. Forestry management

54. It is estimated that 1.6 billion people globally rely heavily on forest resources for their livelihoods. Therefore, adherence to sustainable forest management principles and practices is fundamental to successful implementation of pro-poor programmes in rural settings (see box 6). Many poverty reduction strategies emphasize rural development as one of their main instruments but they fail to recognize the dependence of the rural poor on forests for their survival and the potential of the forest sector to contribute to rural development.

²⁵ Seckler, D. et al., "World water demand and supply, 1990 to 2025: scenarios and issues". Research Report No. 19, International Water Management Institute, Colombo 1998.

Box 6**Share of forestry in rural incomes**

The rural poor derive, on average, one fifth of their household income from forests, mostly from non-timber products such as wild foods, fuel, fodder and thatch grass.^a Regretfully, much of the economic value of forests to the poor is missed in official accountings of the forest economy. Kenya is a typical example. By official estimate, the formal forest sector generates only about \$2 million in earnings per year for sawn timber, pulp and other industrial wood products. This is dwarfed by the value of the informal forestry sector, which contributes some \$94 million in value to rural households in the form of charcoal, fuel wood and the panoply of other forest products. This does not include the recreational value of forests for leisure and tourism, which could amount to \$30 million or so. Since so much of this forest value accrues to the informal sector, most of it is missed.

Source: Mogaka et al., “Economic aspects of community involvement in sustainable forestry management in eastern and southern Africa”, World Conservation Union, Eastern Africa Programme, 2001.

^a Vedeld et al., “Counting on the environment: forest incomes and the rural poor”, Environmental Economic Series, Paper No. 98, World Bank, 2004.

55. The FAO report on the state of the world’s forests notes that forests make a valuable contribution to sustainable development in all parts of the world, but that progress towards sustainable forest management has been uneven. The world has just less than 4 billion hectares of forest, covering about 30 per cent of world’s land area. From 1990 to 2005, the world lost 3 per cent of its total forest area, an average decrease of some 0.2 per cent per year. Some regions, notably those in developed countries and having temperate climates, have made significant progress; institutions are strong and forest area is stable or increasing. Other regions, especially those with developing economies and tropical ecosystems, continue to lose forest area and lack adequate institutions to reverse this trend. The biggest limitation for evaluating progress is weak data. Most countries manage forests for multiple uses, and increasing attention is being paid to the conservation of soil, water, biological diversity and other environmental values. However, the continuing decline in primary forests in most tropical countries is a matter of serious concern.

4. Aquaculture, fisheries and other resources

56. Approximately 90 per cent of total aquaculture production takes place in developing countries. As such, aquaculture makes an important contribution to poverty alleviation, food security and the social well-being of rural people. In many countries, however, this potential has not yet been fully realized.

57. Historically, most aquaculture practices around the world have been pursued with significant social, economic and nutritional benefits and with minimal environmental costs. However, this trend seems to be changing because of weak regulatory frameworks and the too rapid development associated with the great commercial potential of some high value species. Lack of awareness of the role of aquaculture in rural development persists at different levels of rural development

planning. The impact of aquaculture on food security and poverty alleviation in rural areas is also poorly documented and not well known.

58. An estimated 250 million people in developing countries are directly dependent on small-scale fisheries for food and income, primarily in rural areas. In Thailand, for example, 90 per cent of the nation's fisheries are still small-scale operators.²⁶ In the lower Mekong River Basin, a study in 2002 found that 40 million rural dwellers — many of them poor — engage in seasonal fishing activities. In the Lao People's Democratic Republic, where the incidence of rural poverty is quite high, 70 per cent of all farm households augment their family food supplies and incomes with fish.²⁷

59. In many rural settings, the income generated from common pool resources (for example, forests, fisheries, reefs, waterways, pastures and mineral resources) is a major constituent of the household incomes of the rural poor. A combination of factors, including privatization, agricultural intensification, population growth and ecosystem degradation, have caused common property areas to dwindle in size, quality and availability to the poor in much of the world.²⁸

D. Rural finance

60. Access to finance is increasingly acknowledged as a contributor to eradicating rural poverty. For example, the African Development Bank has launched a partnership to help tackle the limited access to and high costs of finance in Africa which prevent, for instance, 20 per cent of adults in sub-Saharan Africa from holding a bank account at a formal or quasi-formal financial institution.²⁹ The development of a sustainable financial sector in rural areas faces many challenges but can provide the foundation leading towards increased investment and income opportunities to rural and agricultural households and businesses. Development banks and agencies usually assert that public intervention in rural financial markets has been detrimental to their sound development,³⁰ but do acknowledge the role of Government in building the proper regulatory and institutional infrastructure to support the development of financial markets in rural areas.

61. Geographic dispersion of financial institutions, or remote access to their services, is another area that needs to be addressed in order to reach the more remote and less densely populated rural areas.³¹ Moreover, the diversity of rural areas, from an intra- or interregional perspective, and of the needs of clients calls

²⁶ See <http://www.wri.org/publication/content/8061>.

²⁷ Sverdrup-Jensen, "Fisheries in the Lower Mekong Basin: Status and Perspectives", Mekong River Commission Technical Paper No. 6, 2002.

²⁸ See <http://www.wri.org/publication/content/8055>.

²⁹ See http://www.adb.org/Documents/Periodicals/ADB_Review/2003/vol135_6/pawnshops.asp.

³⁰ Fernando, N. A. and Moyes, R. T., "Moving towards inclusive rural financial markets in Central Asia", in Lamberte, M. B. et al., *Beyond Microfinance — Building Inclusive Rural Financial Markets in Central Asia*, Asian Development Bank, 2006.

³¹ An argument used against such delocalization is that in certain remote areas the provision of financial services is economically unsustainable. This is certainly a valid affirmation in Latin America but has proved wrong, for instance, in Mongolia. In that country, despite a population density of 1.5 persons per km², its formal financial institutions have proved to be viable and efficient.

out for a wide array of financial institutions, from formal to informal ones, which are able to meet specific needs.

62. Informal finance of various types plays an important role in rural markets. Village banking institutions are present in many rural areas around the world. Those institutions, often started by non-governmental organizations, have generally performed well in terms of sustainability indicators, such as adjusted return on assets and operational self-sufficiency, and over time may form strategic partnerships with banks to expand their services and products. Local savings and credit associations have a mixed record but generally do well when adequate management is in place. Given the focus of those organizations on poor clients, with added capacity they would present a greater potential in fighting rural poverty.

63. Self-help financial organizations have grown significantly in Africa and Asia. They are adapted to local market conditions and provide short-term loans and savings for household consumption-smoothing. Their services are very limited. By themselves, these informal lenders are not equipped to finance substantial long-term investments unless they form linkages with the formal sector.

64. In addition there are other sources of non-bank rural financial services. They include short-term finance from pawnshops, whose operations are very simple and fast with low transaction costs for both lender and borrower. Another source is through remittances, which are now serving as an important source of rural finance. Migration gives rise to remittances that currently benefit some 1 billion people, almost one sixth of the global population,³² the majority of whom live in rural areas. Policies that support rural livelihoods and encourage investment in rural areas have proven to be helpful for managing migration, improving the livelihoods of migrants and their families, and reducing rural poverty. A final source to highlight is that of rural traders and agribusinesses. As agriculture becomes more integrated into market-driven value chains, this traditional source of funds will grow in scope and importance.

E. Access to local markets

65. The main thrust of programmes aimed at facilitating better access to local markets by small producers has traditionally been on bridging the information gap through the creation of market information services, as well as building roads from farms to markets and improving other market infrastructure, and on providing assistance to small producers in identifying potential markets. More recently, efforts have concentrated on enabling partnerships along the market chain, inter alia, by fostering formal and informal equitable contracts between producers and traders and processors and retailers, including by facilitating the development of small producers (farmers) associations in order to better take advantage of market opportunities.³³

66. Recognizing the importance of access to markets in overcoming poverty in rural households, IFAD has increased its financial assistance to projects that encompass such a component. The proportion of projects with this component

³² See <http://www.fao.org/newsroom/en/news/2006/1000313/index.html>.

³³ Shepherd, Andrew W., "Approaches to linking producers to markets", *Agricultural Management, Marketing and Finance Occasional Paper 13*. FAO, 2007.

increased from 18 per cent over the period from 1991 to 1995 to 38 per cent between 1999 and 2001. Some examples of projects with a market access component include, among others: El Salvador, to transform agricultural and non-agricultural rural activities into profitable rural businesses by providing specialized technical and business-related assistance and resources to approximately 33,000 people; and the Maldives, to assist small producers and processors in the agriculture and fisheries sector to help them improve the quality of their products and access new niche markets in which to sell them.

III. Continuing challenges

67. The overall progress in reducing rural poverty has been slow, but there are several successful experiences that show the way forward in terms of what can work and under what circumstances. While the main thrust of rural development efforts remains in the agriculture sector, the evidence suggests that reducing rural poverty through agricultural development alone would be difficult. The challenge is to foster development in rural areas that benefits entire communities, and not only those who are engaged in agricultural activities.

68. The lack of broad-based investments in the rural sector aimed at, inter alia, enhancing efficiency and productivity of agriculture, tapping the potential of the non-farm sector, improving the management of natural resources and enhancing the quality of rural infrastructure, are specific barriers to promoting growth and reducing poverty in rural areas. Further challenges to promoting economic growth in rural areas include strengthening partnerships and providing technical assistance on market-oriented farming and small- and medium-scale agro-enterprises development to promote competitive rural agro-industries. Promoting local craftsmanship and tourism in some cases also may benefit the rural economies.

69. Limited access to rural finance, improved agricultural inputs, modern energy services, local markets and market information, storage facilities, transportation, technology, education and other social services serve as major barriers to stimulate growth in rural economies. Ensuring that rural finance supports income-generating activities outside the agriculture sector, including tapping the informal financing sector, could contribute significantly to achieving sustainable rural development.

70. The need to appropriately design rural development programmes, and then to ensure their effective implementation and monitoring, can hardly be overemphasized. Often, the biggest limitation in evaluating progress in rural development is weak data. For example, the impact of non-agricultural activities on reducing rural poverty cannot be sufficiently studied owing to the lack of global, consistent and easily comparable data for all the regions. Also, inadequate capacities exist in national statistical offices and censuses to generate and obtain rural/urban disaggregated data on socio-economic and environmental aspect of rural economies.

71. Natural resources are a primary source of livelihood of people in developing countries, but their overexploitation in many countries is creating a devastating impact on the living conditions of the rural poor. Therefore, it is crucial to secure a balance between maximizing the productivity of natural resources, on the one hand, and ensuring their conservation on the other.

72. The poor face significant barriers in their fight against poverty, including lack of access to safe drinking water, basic sanitation, clean and affordable modern energy sources, and medical care. Certain vulnerable groups, such as women, suffer even more from lack of access to those basic services. Insufficient resource allocations in national and local budgets remain a serious constraint in expanding the provision of basic social services. Strengthening the capacities of local institutions is vital to enhancing the sustainability of existing rural development schemes.

73. While rural development is essential to achieving sustainable development, it cannot be realized without adequate community empowerment and participation. One key obstacle to community empowerment is the lack of education and literacy in rural communities. Public investment in rural education in developing countries has often been inadequate. In addition to increasing public spending on education and the participation of civil society organizations and other relevant stakeholders, it is important to bridge the education gaps in remote rural areas. Equally important is to address the various social and cultural constraints that inhibit the full participation of marginalized and disadvantaged groups in the development and implementation of rural development programmes.
