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Item 3 of the provisional agenda<sup>1</sup>**Thematic cluster for the implementation cycle****2008-2009 – policy session****Policy options and actions for expediting progress in  
implementation: Inter-linkages and cross-cutting issues****Report of the Secretary-General***Summary*

Strong inter-linkages and interlocking relationships among the six issues in the thematic cluster exist so that policies and measures aimed at one issue may have co-benefits for other issues and therefore should be considered through an integrated approach in order to achieve long-term progress. Sustainable agriculture and natural resources management practices could increase productivity of scarce land resources and help protect watersheds. Such inter-linkages are highlighted in the present report with a view towards developing a menu of policy options and measures of optimal effectiveness. The interlinked aspects of those issues are also reflected in the separate thematic reports where appropriate. International cooperative efforts can help to ensure that urgent and effective action is taken that builds on the inter-linkages among those issues to further

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<sup>1</sup> E/CN.17/2009/1.

implementation and thus effectively contribute to achieving the goals of sustainable development.

Furthermore, most of the cross-cutting issues identified at the eleventh session of the Commission on Sustainable Development, including those related to the means of implementation, are relevant within the context of the thematic cluster of issues under consideration. Policy options and measures to further sustainable development goals with respect to the cross-cutting issues and agriculture, rural development, land, drought, desertification and Africa are identified.

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## **I. Introduction**

1. At its sixteenth session, the review session of the third implementation cycle 2008-2009, the Commission on Sustainable Development undertook an evaluation of progress in implementing Agenda 21, the Programme for the Further Implementation of Agenda 21, the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation), while focusing on identifying constraints and obstacles in the process of implementation with regard to the current thematic cluster. This cluster covers the issues of agriculture, rural development, land, drought, desertification and Africa. The report of the review session<sup>2</sup> includes a chairperson's summary that reflects the constraints and obstacles, and possible approaches and best practices for the implementation of those intergovernmental agreements, as well as the way forward identified by the Ministers attending the high-level segment.

2. The present report is a contribution to the Commission's consideration of policy options and possible actions to address the constraints and obstacles to implementation identified in the report of the review session. The seventeenth session of the Commission on Sustainable Development will take policy decisions on practical measures and options to expedite implementation for the selected thematic cluster of issues, taking account of the discussions of the intergovernmental preparatory meeting, reports of the Secretary-General and other relevant inputs.

3. The present report draws on a number of sources, including national reports and case studies submitted by Member States, the outcomes of regional implementation meetings, and contributions from major groups, regional commissions and UN specialized agencies, funds and programmes. As close linkages exist among the six issues of this thematic cluster, the relevance of those inter-linkages for policy options is considered in a separate section. Cross-cutting issues identified at the eleventh session of the Commission are considered in the present report as well as in the six thematic reports prepared for the current session (E/CN.17/2009/3-8).

## **II. Inter-linkages among thematic issues**

4. A holistic approach using national sustainable development strategies and other national sustainable development plans can yield better results by addressing the inter-linkages among the issues, especially when considering policy options, undertaking actions and implementing on-the-ground projects.

5. National sustainable development strategies have proven to be successful in many developed and developing countries. They enhance the consistency of comprehensive and sectoral plans and facilitate the integration of crosscutting issues into sectoral strategies. In

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<sup>2</sup> See E/2008/29

some developing countries, the implementation of national plans and efforts had resulted in the achievement of significant progress towards sustainable development.

6. A number of countries have established mechanisms for the review of national strategies for sustainable development and shared learning, which offer a promising way to further advance the implementation of such strategies and the fulfilment of the commitments set out in the Johannesburg Plan of Implementation.

7. Policy options and possible actions can be more effective if their interlinked aspects are taken into consideration at the outset. The thematic cluster of agriculture, rural development, land, drought, desertification and Africa has significant interlinkages. Africa, where most population depends on agriculture for their livelihoods, would significantly benefit from this integrated and interlinked approach.

8. Enhancing human and social capital through education and inclusive social participation, cost-effective, reliable, and affordable infrastructure services, strengthening agro-industrial base, promoting non-farming employment, managing natural resources in an integrated and holistic manner, strengthening an enabling environment for implementation including through participatory decision-making by key stakeholders, such as women, access to finance and global and regional markets, improving educational opportunities and adequate access to information available to rural farmers to improve agricultural production techniques or to diversify their income through non-farming activities will result in a coherent rural development that will benefit development of sustainable agriculture.

9. Rural policies, plans and institutions must ensure that they contribute to resolving conflicts over scarce resources. Successful examples include multi-stakeholder and decentralized processes for local empowerment and conflict resolution among user groups.

10. It is also necessary to establish and promote incentives for, and address barriers to, sustainable agriculture development and sustainable land and other natural resources management, especially in Africa.

11. A more productive and profitable agricultural sector is a necessary component in meeting the Millennium Development Goals related to poverty and hunger, but prospects of increasing agricultural productivity are hindered by many factors. These include age-old land tenure systems, poor land quality, and subsistence farming practices, lack of access to markets and capital inputs, high transportation costs, highly variable climatic conditions and a scarcity of water. With this in mind, there is a need to secure partnerships between national governments and the private sector to meet the required level of investments in agriculture and rural development. Where public-private investments and partnerships are concerned, investments and corporate accountability measures must be put in place.

12. Raising agricultural productivity around the globe is clearly crucial in addressing the substantial increase of both food consumption and land use for non-food purposes. At the

national level, it needs to become a priority in development strategies. Developing countries must design a policy framework that creates the right incentives for investment in agriculture and defines the appropriate mix between food and export crops. They must provide the necessary infrastructure and extension services. They should calibrate their national trade policies to promote sustainable agricultural production, eliminate tariffs on agricultural inputs and provide better training and knowledge to farmers. At the international level, these efforts must be supported through increased official development assistance (ODA) and investment in infrastructure and agricultural research and development<sup>3</sup>.

13. Agricultural development policies need to be underpinned by production practices that are competitive and sustainable, and production systems and supply chains are supported by cost-saving policies and institutional support to encourage private sector engagement. On the production and output marketing side, policies must encourage and reward those producers who form producer associations to capture economies of scale in production and in input and output markets, and those who adopt good farming practices. In this regard, payments to farmers for ecosystem services may often merit increasing policy consideration<sup>4</sup>.

14. There is also a need for linking agricultural and land use policies to the goals of sustainable development. Evidence suggests that sustainable agricultural land use policies yield better results if tailored to local conditions. Decentralization of implementation to the local level, empowerment of local communities, stakeholder participation and the building of partnerships create favourable conditions for effective implementation of policies and measures.

15. Sustainable land productivity is a key natural resource asset for the typical rural household. It is based on a complex of management practices and knowledge base that include the management of soil-water-crop-livestock integrated systems in which the functioning of agro-biodiversity in every part of such systems is an important contributor to system efficiency and ecosystem services, and therefore to cost-effectiveness and sustainability.

16. In this context, protecting and managing the natural resources base is a central aspect of the equation for sustainable development and poverty reduction. Steps need to be taken to minimize resources degradation, to protect ecosystem services and to strengthen livelihoods. Combating land degradation, desertification and drought is key for mitigating the impacts of climate change, reducing poverty, as well as protecting biodiversity. Policies and actions to promote balanced ecosystem approaches to land use are needed.

17. Sustainable and integrated management of land resources is central to all efforts involving land issues and tools and technologies exist for it, but they need to be adapted and their application increased to provide sustainable impacts for human livelihoods and ecosystems. Frequently these tools and techniques have multiple benefits. For example soil

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<sup>3</sup> UNCTAD Policy Briefs, No.2, Tackling the global food crisis, 02/06/08 (UNCTAD/PRESS/PB/2008/1)

<sup>4</sup> Ibid

carbon sequestration holds great potential for increasing carbon content in the soil and also for benefiting soil biodiversity, soil fertility and soil water storage capacity and hence agricultural productivity.

18. Practices of good land administration require integrated approaches to address challenges in the legal, financial, institutional and technical aspects of land management including the impact land uses and practices will have on broader areas such as social housing, energy efficiency or spatial planning.

19. Inter-linkages with the issues of other thematic clusters are also important. Water provides an important link to agriculture and rural development. Integrated water resources management can be applied as a framework within which to assess and allocate competing water uses, for example for agriculture, especially irrigation in drought-prone areas, and for domestic use of safe drinking water.

20. Improving water management in agriculture requires an improvement in soil moisture conservation measures and a reduction in wastage of irrigation water. Reduction in water wastage also brings additional benefit in terms of minimizing loss of applied nutrients, water erosion and pollution of surface and ground water. Expanded use of economic incentives, including metering and pricing to encourage water conservation and development of water markets and implementation of virtual water trade, holds considerable promise for water savings and reallocation of water to highly valued uses.

21. Policies to reform the water sector must go hand in hand with policies to promote greater investments in infrastructure. However, infrastructure development must be eco-efficient, avoiding environmental damage that has been characteristic of some approaches to irrigation development. Reliable water supplies are critical for food production, increasing yield, reducing agricultural risk, and stabilizing farm incomes. Water reliability and availability affect food security. It is more urgent than ever to reinstate adequate legal and institutional frameworks that encourage sound water management, help increase land productivity and thus enhance the availability dimension of food security<sup>5</sup>.

22. Given these important intersectoral inter-linkages, more effort could be given to assisting developing countries with the integrated water resources management plans, in accordance with the Johannesburg Plan of Implementation and as stipulated in the resolution on policy options and practical measures to expedite implementation in water, sanitation and human settlements adopted at the thirteenth session of the Commission on Sustainable Development<sup>6</sup>. The resolution asks for accelerating the provision of technical and financial assistance to countries in preparing nationally owned integrated water resources management and water-efficiency plans tailored to country-specific needs, paying particular attention to

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<sup>5</sup> Contribution by the Economic and Social Commission for Asia and the Pacific

<sup>6</sup> Resolution 13/1: Policy options and practical measures to expedite implementation in water, sanitation and human settlements, E/2005/29, E/CN.17/2005/12

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economic development, social and environmental needs and supporting implementation through learning-by-doing.

23. Climate change impacts can pose a threat to prosperity and security through social and economic disruptions. Major shifts in rainfall patterns could lead to reduced agricultural productivity and hence reduced food security and increased poverty, particularly in least developed countries. Also, sea-level rise could lead to the inundation of many low-lying countries and regions, especially the small island developing States.

24. The impacts and responses of climate change are differentiated by gender and socio-economic considerations, based on the social rules, societal expectations, access to critical resources and livelihood opportunities.

25. The interface between climate change and desertification need also to be addressed in policies to combat desertification and policy-making needs to anticipate these impacts to be able to assist affected rural communities in raising their ability to adapt to climate change. Policies should be, therefore, put in place by governments and other agencies to integrate these challenges. National governments need to develop effective drought early warning systems that integrate precipitation and other climatic parameters with water information such as stream flow, snow pack, groundwater levels, reservoir and lake levels, and soil moisture into a comprehensive assessment of current and future drought and water supply conditions.

26. Increased access to affordable sources of energy, including renewable energy underpins sustainable rural development, but increasingly influences sustainable land management. In each case, energy, agriculture and land use policies must be carefully examined to determine that incentives for particular land uses and production systems represent the optimal uses of land and do not impact negatively on small producers, food security and ecosystem integrity. The incentives and opportunities provided by biofuels require careful assessment and identification of responses.

27. Lack of access to modern energy services and reliance on traditional biomass fuels inhibits local communities by decreasing the competitiveness and sustainability of small agro-industries. It also signifies huge forest and energy losses as well as a health hazard due to smoke-filled environments.

### **III. Cross-cutting issues**

28. Addressing the interlocking relationships among the thematic and cross-cutting issues through an integrated approach, which includes the promotion of partnerships at all levels and bringing together multiple stakeholders, is essential to achieving long-term progress.

29. Some of the cross-cutting issues identified at the eleventh session of the Commission on Sustainable Development are particularly relevant to the cluster of themes under consideration. They are considered here and in the thematic reports (E/CN.17/2009/3-8) as appropriate.

30. Gender inequality has proven to be a constraint to growth and poverty reduction. Women working in the agricultural sector in particular tend to be invisible workers, and most of the income from agricultural activities goes to men. Women farmers lack access to land, access to credits, access to markets and market chains and lack of training. Empowering women should be given priority attention by governments.

31. Gender-responsive interventions that aim at successfully impacting overall productivity, income and natural resource management need to target development assistance specifically at women. The formation of women's groups to improve rights and access to services is a well-established means of social and economic empowerment.

32. Pursuing sustainable patterns of consumption and production, with developed countries taking the lead, in line with the principle of common but differentiated responsibilities, is essential to making progress in the thematic cluster of agriculture, rural development, land, drought, desertification and Africa. The enhanced consistency in national sustainable development strategies has resulted in greater economic resilience, lower energy intensities and lower energy costs per unit of production or consumption, with corresponding environmental and social benefits.

33. Policies and actions to promote environmentally sustainable consumption patterns in relation to food, fuel, water and agro-industrial products are needed. These policies will, consequently improve the environmental sustainability of agricultural production patterns. Such policies should take a gender-balanced approach and are key for promoting 'green growth.'

34. Creating an enabling international environment for integrating trade of developing countries into the world trade especially through prioritizing trade links to development and poverty reduction in national development strategies as well as substantially reducing tariffs and non-tariff barriers imposed by developed countries on agricultural products and textiles and clothing from developing countries is of utmost importance. To this end, there is the need for successful and timely conclusion of Doha Development Round.

35. It is necessary to foster greater trade openness as increased trade can help boost industrial diversification including through access to imported technologies, intermediate inputs, and access to global and regional markets. Market-oriented farming and small and medium-scale agro-enterprise development may promote competitive rural agro-industries and foster growth and help farmers gain access to markets in order to escape poverty.

36. Targeted export promotion measures can be effective in encouraging diversification towards non-traditional exports that integrate domestic firms into international supply chains. Aid-for-trade initiatives and preferential trade treatment can help developing countries, especially in Africa, to build the supply-side capacity and to expand their trade more broadly.

37. Policies and measures on the thematic cluster of issues under consideration have potential to contribute significantly to achieving sustainable development goals in small island developing States. The interdependent relationship of land, agriculture, rural development, drought and desertification in small island developing States, given their size, limited land and narrow natural resource bases and the fragility of their terrestrial and coastal ecosystems is very important.

38. Effective land-use strategies can help address the increasing pressure on limited land resources in small island developing States through strengthened human resource and institutional capacity and watershed, coastal zone and land use change management. Agricultural diversification, by broadening small island developing States' export economies, can improve the resilience of the rural sector to economic shocks and natural disasters. The sustainable management of fisheries, forestry and agriculture and freshwater resources is important to improving food security and access. Sustainable natural resource management, consideration of culture and land tenure systems and the empowering of women and youth are all important components of rural development strategies in small island developing States.

39. The World Health Report 2008 identifies primary care as a key policy concern in rural areas<sup>7</sup>. Health services fall short of meeting the needs of the rural poor. Rural health care is further underscored by contaminated food and water, hunger, malnutrition and high incidences of diseases. Global climate change is expected to pose direct threats to health by causing more severe storms, floods, droughts and fires, with consequent disruptions in water and food supplies, medical and other services. Primary care requires teams of health professionals with specific and sophisticated biomedical and social skills in order to deliver good health services to rural populations.

40. The importance of education is one of the most important cross-cutting issues for the thematic cluster under consideration. According to the latest estimates of the United Nations Literacy Decade (UNLD, 2003-2012)<sup>8</sup>, there are about 774 million illiterate adults in the world, two thirds of whom were women. Linking educational activities to the specific needs of the rural community will improve their livelihoods and allow them to seize economic opportunities. Education policies and other actions must encourage and empower rural development, agriculture and land development communities to think in the frame of ecosystems, and harness indigenous knowledge. FAO's Education for Rural People Initiative (ERP), aims to overcome the urban/rural gap in education, to increase access to and the quality of basic education for rural people, and to build awareness of rural education in the achievement of the Millennium Development Goals. Rural education benefits from the introduction of policies that promote increased interaction among research institutions, the private sector and the government.

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<sup>7</sup> "World Health Report 2008," World Health Organization, [http://www.who.int/whr/2008/whr08\\_en.pdf](http://www.who.int/whr/2008/whr08_en.pdf)

<sup>8</sup> "World Literacy in Brief: UNESCO Education" [http://portal.unesco.org/education/en/ev.php-URL\\_ID=12874&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=12874&URL_DO=DO_TOPIC&URL_SECTION=201.html)

41. Science and technology plays an important role in increasing agricultural production, while maintaining critical ecosystem services. Therefore, the advancement and application of agricultural knowledge, science, and technology (AKST) must be at the centre of efforts to address this challenge.

#### **IV. Means of implementation**

42. The global landscape has changed. The years 2002-2008 saw the largest consecutive period of world economic growth ever, fueled by productivity increases and low inflation. However, current global crises are seen by many, as having a negative impact on a number of sustainable development issues from widening of global socio-economic divisions, climate change and resource competition to maintaining of security. Countering such trends involves fair trade, debt cancellation, assistance for sustainable development, a radical cut in carbon emissions, rapidly increased use of renewable energy resources and the development of conflict prevention. Consequently, responding to the current crisis can either be a process limited to the narrow domestic concerns or it can be seen as an opportunity for reform of the world's economic system that will benefit the majority of the world<sup>9</sup>.

43. In this context, swift actions of governments are needed if they are to exploit more fully the scope for international cooperation to render policy more effective in serving those concerned about security, be it financial, food or energy.

44. Therefore, in current global environment, an adequate and predictable flow of financial resources has become even more important for implementing the intergovernmental agreements related to the six issues of this thematic cluster. Bilateral support provided through ODA and multilateral support from the Global Environment Facility (GEF) and international financial institutions (IFIs) will continue to be important financing sources for many developing countries, especially for infrastructure projects where large-scale investments with long payback periods are required.

45. Thus, GEF has adopted land degradation as its Focal Area and in collaboration with the UN Convention to Combat Desertification has enabled GEF to become a major source of funding to support integrating sustainable land management into national sustainable development priorities and implementing innovative sustainable land management practices especially in small island developing States and least developed countries which may lack the appropriate capacity to support sustainable land management.

46. Adaptation Fund of the UN Framework Convention on Climate Change (UNFCCC) is also a new and innovative instrument for funding as it is set to fund concrete adaptation activities that are tailored for particular country needs. The first Adaptation Fund Board

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<sup>9</sup> The Financial Crisis and Sustainable Security, Oxford Research Group, September 2008

meeting, which was held in March 2008, began its work in developing guidelines and procedures for accessing the Fund. Several specific tasks were proposed to be allocated to the GEF as Secretariat to the Adaptation Fund, from the: management of the daily operations of the Fund to ensuring the implementation of operational policies adopted by the Board, operationalizing the project cycle and coordinating the formulation and oversight of the implementation of program activities.

47. The Millennium Development Goal target of dealing comprehensively with the debt problems of developing countries has not been achieved in full. Debt relief in all forms (HIPC, MDRI, traditional debt relief and other “voluntary” bilateral debt relief) has reduced debt considerably, thereby creating an environment for investment and recovery without heavy debt burdens. However, the debt vulnerability indicators of most HIPC participants have tended to deteriorate after debt relief is received. In addition, debt relief efforts have not been available to non-HIPC debt-distressed countries which have no mechanisms in place for orderly sovereign debt restructuring. There has been insufficient progress in developing adequate institutional mechanisms for better debt management. Many African countries still carry levels of debt that, while considered sustainable, leave insufficient fiscal space to scale up public spending on education, health, infrastructure and poverty reduction to achieve the Millennium Development Goals.<sup>10</sup>

48. Regarding better use of aid, commitments on improving aid effectiveness need to be met. Accelerated progress towards meeting the targets set in the Paris Declaration is necessary and should not only help to improve the predictability of aid and avoid aid fragmentation and high transaction costs in the administration of aid resources, but should also reduce the degree of aid tied to the purchase of goods and services provided by donor countries and contribute to improving the alignment of aid flows with national budgets, thus broadening the policy space for countries to define their own development priorities.

49. For most of the past quarter-century, agriculture declined steadily as a focus of development efforts. Many developing countries themselves assigned their national priorities to other sectors. This decrease in domestic public expenditures by countries in their agricultural sectors have exacerbated already difficult situation in most vulnerable developing countries. Agriculture-based developing countries – typically the poorest of all developing countries – spent an average of only 4 per cent of total budgetary resources on supporting agriculture in 2004. Yet this sector represented the single largest economic activity for close to 70 per cent of the population and contributed 29 per cent of GDP<sup>11</sup>.

50. There is, also an urgent need for increase investment in agriculture, agribusiness and rural development from both public and private sources. The amount of official development assistance (ODA). to agriculture fell in nominal terms from US\$8 billion in 1984 to around

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<sup>10</sup> High-level event on MDGs, SG’s report

<sup>11</sup> World Development Report 2008, World Bank

US\$3 billion in 2006, while the proportion of total ODA to agriculture declined from a high of about 18 per cent in 1979 to less than 3 per cent in 2006<sup>12</sup>.

51. Some of the new investments should be directed towards policy support and technical assistance for national capacity building for mainstreaming sustainable production practices. Such support should focus on research and technology development for ecosystem-based approaches, and where possible on identifying opportunities for rewarding producers for enhancing ecosystem services such as carbon sequestration, rainfall capture, agrobiodiversity stewardship<sup>13</sup>.

52. Additionally, adequate investment policies need to be promoted at the regional level, in order to ensure that future agricultural development benefits the poorer farmers equally. Government policies should lead to better coordination to ensure that these investment opportunities contribute effectively to rural development and poverty eradication and also to eco-efficiency improvement in agricultural development.

53. Creation of a favourable climate to attract public and private capital to raise agricultural production and bring about the needed structural and organizational changes should be a major policy goal. This should be fostered through national policies and strategies for long-term development of large agro-ecological areas, thus offering investment opportunity in linking good production practices and their technical considerations to stakeholder engagement from public, private and civil sectors.

54. External resources are vitally important in financing development. Foreign direct investment (FDI) in particular is needed. Therefore, the international community should continue to promote regulatory, tax, fiscal and other economic incentives encouraging inward FDI such as preferential access to developed countries' markets. Developing efficient regional and sub-regional markets would also help create larger more attractive markets, including through the removal of domestic market impediments and 'between-the-borders' impediments inhibiting cross-border trade.

55. The task of increasing private capital flows for developing economies remains challenging. It could be accomplished through a number of possible policies and actions by national governments, including: reducing uncertainty and perceived risks to investors; creating political and macroeconomic stability, in conjunction with policy transparency and consistency; creating investment-friendly regulatory frameworks, applied in a consistent, transparent and fair manner; adopting active inward FDI promotion at national and sub-national government level; improving institutions for the rule of law, including those governing property rights, contract enforcement and strength and impartiality of the judiciary; curbing corruption, in the form of both explicit bribes and so-called "facilitation payments"; improving the quality of the basic infrastructure in the form of roads, ports, railways and access to electricity needed to

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<sup>12</sup> IFAD's contribution to the seventeenth session of the Commission on Sustainable Development

<sup>13</sup> FAO's contribution to the seventeenth session of the Commission on Sustainable Development

attract FDI and other forms of private capital; improving the quality and quantity of human capital stock, through increased investment in education and targeted skills investment.

56. Global cooperation and global regulation are imperative in current global crises. Both international trade in goods and services and global finance require a predictable and rules-based multilateral framework that can be achieved only through a multilateral approach. In this context the international community must assist commodity-dependent countries. Here, the support can take the form of direct intervention in markets as well as grants and loans to buffer and stabilize the sharp drop in revenues. All countries with low and declining inflation rates must engage immediately in countercyclical measures in terms of stimulus by fiscal measures and interest rate cuts<sup>14</sup>.

57. Technology transfer is important for realizing progress on all six issues of this thematic cluster. Given the strength of the private sector's technical know-how, initiatives for technology transfer and diffusion could benefit from public-private partnerships. These partnerships hold potential for facilitating such transfer and diffusion where intellectual property rights are concerned. Transfer of technology and know-how could also be facilitated by encouraging FDI, particularly where broader linkages can be established.

58. Effective formulation and implementation of policies require interdisciplinary institutional capacity at all levels, and sustaining such interdisciplinary capacity must always be at the heart of good governance and policy management for sustainable development.

59. Capacity-building at the local and national levels is needed in order to achieve interdisciplinary expertise required to deal with challenges of this thematic cluster. Thus, the implementation of sustainable agricultural policies and actions must move away from the simple notion that plant and animal production intensification can be achieved based simply on improved seeds and fertilizer and that agronomy and natural resource management, production systems, including crop-livestock integration, and ecosystem services are of minor importance. Regional projects such as developing centres of excellence in land policy, tenure and management in order to supply the knowledge and expertise necessary for the implementation of new land policies and development of land institutions to support economic development and renewal of governance systems in the 21<sup>st</sup> Century can provide the motivation for strengthening relevant national institutions through capacity-building. For example the idea of a pan-African framework for land policy and land reforms to strengthen capacities on related policy issues is being discussed<sup>15</sup>.

60. The access to information and communication technologies (ICT) is of utmost importance in our increasingly 'knowledge-based' societies. There is sufficient evidence of the potential of ICT that all governments and other stakeholders need to build new capabilities for producing, accessing and using these technologies. In order to build these capabilities each

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<sup>14</sup> UNCTAD Policy Briefs, No.4, Rebuilding financial multilateralism, 24/10/08 (UNCTAD/PRESS/PB/2008/4)

<sup>15</sup> Policy options and possible actions to expedite implementation: Land, Report of the Secretary-General

country should establish and implement a national ICT strategy that is responsive to sustainable development goals.

61. Strengthening of research and development (R&D) is necessary for sustainable development. R&D has to promote inter- and transdisciplinary approaches involving social and natural sciences and bridge the gap between science, policy-making and implementation. Universities and other higher education institutions have a key role in providing education and training that equip the qualified workforce with the necessary competences to fully develop and exploit sustainable technologies.

## **V. Regional Perspectives**

62. Policy options and possible actions directed towards promoting regional and interregional cooperation can be enhanced by greater focus on the inter-linkages among the six issues of the thematic cluster. It is also necessary to improve cooperation with and among regional and sub-regional organizations, regional development banks, private sector and civil society.

63. Linking and coordinating regional and subregional initiatives with national development processes in strengthening natural resources governance systems at all levels through reinforcing institutional capacity, including human, technical and financial will have great impact. It is also necessary to adopt and implement effective policies and legislation and foster stakeholder ownership and local participation in natural resources management and development.

64. The integration of the national and regional action programmes to combat desertification and drought into national development frameworks and poverty reduction strategies can improve their effective implementation, in particular if supported by strong institutional capacities and legal frameworks.

65. Among the range of issues in development planning, regional plans especially for Africa, where the whole continent shares similar sustainable development challenges, such as water scarcity, land degradation, drought and desertification, have improved regional cooperation especially within the framework of New Partnership for African Development (NEPAD). NEPAD provides capacity-building, reinforces regional and subregional cooperation, promotes better regional governance and provides support for the implementation of the NEPAD environment initiative.

66. Agricultural growth has been found to be four times more effective in reducing poverty than growth in other sectors. Consequently, the implementation and scaling-up of initiatives to support improved agricultural productivity, particularly amongst smallholder farmers; enhanced food security; more efficient food distribution; and better nutrition across Africa will be critical to speeding growth, increasing incomes and improving the continent's human development indicators. In this respect, African Governments have committed themselves to achieving

significant objectives, notably those of the NEPAD Comprehensive African Agricultural Development Programme. Those objectives include that of devoting at least 10 per cent of national budgets to agriculture and rural development. Additionally, adopting harmonized approaches and flexibility on funding disbursement procedures in order to deliver Sustainable Agriculture and Rural Development (SARD) assistance within the countries' strategic frameworks works better than financing in a fragmented way - project-by-project.

67. It is also important for African countries to expend the domestic resources base for investments in SARD by enhancing national SARD policy coherence, commitment and prioritisation in national development frameworks and programmes, including Poverty Reduction Strategies (PRSs) as well as to enhance access to markets for small-scale farmers as part of SARD and remove distortions in prices of agricultural products to provide incentives for farmers to invest and produce<sup>16</sup>.

68. Adequate investment policies need to be promoted at the regional level. With high food prices expected to persist, the private sector, encouraged by government policies, is expected to increase its investments in agricultural production, as the latter becomes more profitable. Such shifts are already visible in many developing countries. Increased investment in agriculture can serve as an opportunity for poverty reduction.<sup>17</sup> In this context, Economic and Social Commission for West Asia stresses importance of strengthening and fostering the cooperation and collaboration of the United Nations organizations operating in the region with the League of Arab States (LAS) for delivering better results.

69. Regarding regional cooperation in combating drought and desertification, it is essential to improve the regional information base on drought and desertification and enhance both scientific and indigenous knowledge application through programmes to strengthen the collection of information through targeted research. It is also necessary to coordinate measures for drought and desertification with those measures aimed at adapting to climate change and biodiversity conservation so as to enhance synergy, diversify resources available for implementation of national action plans (NAPs) and related programmes to scale-up sustainable land management programmes. It is important in particular to undertake land rehabilitation as a means to adapt to climate change<sup>18</sup>.

70. The degradation and desertification affecting most of Latin America and the Caribbean (LAC) - phenomena closely associated with deforestation and overgrazing - continue their course, and the loss of soil is becoming practically irreversible, since restoration, even where theoretically possible, is costly. Although well known for its rain forests, Latin America and the Caribbean is actually about one-quarter desert and drylands (20,533,000 km<sup>2</sup>). The main consequence of desertification and drought is a sharp drop in the productivity of ecosystems, taking the form of a decline in agricultural, livestock and forestry yields and a loss of

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<sup>16</sup> Contribution by the Economic Commission for Africa

<sup>17</sup> Contribution by the Economic and Social Commission for Asia and the Pacific

<sup>18</sup> Contribution by the Economic Commission for Africa

biological diversity; from the social point of view, the results are impoverishment, migration, internal population movements, and the deterioration of the quality of life; the LAC region will therefore have to adopt an integrated approach to problems of desertification and drought by promoting sustainable development models that are in keeping with the environmental, economic and social situation in each country.

71. The October 2007 report of the Intergovernmental Panel on Climate Change stresses the problem of increasing deforestation due to the pressure of soybean plantations on other crops and particularly excessive cattle farming in the LAC region. If deforestation continues at the present rate, another 55 million hectares of forest can be expected to disappear by 2020.

72. Appropriate policies are necessary to ensure eco-efficient use of natural resources for inclusive, sustainable socio-economic development as identified in the Asia-Pacific region. In this context, the need to guarantee food security for millions of people, against the backdrop of increasing fuel and food prices, is widely recognized as a complex issue of agricultural development, including resources management in addition to well targeted social protection measures and carefully formulated trade policies.

73. As shown in the Economic Commission for Europe region, practices of good land administration are essential for addressing challenges in all aspects of land management. Such an approach should incorporate an assessment of the impact land uses and practices will have on broader areas such as social housing, energy efficiency or spatial planning. Unless holistic guidelines are embraced, the region will fall in a “compartmentalization trap,” where a solution to one problem may lead to difficulties addressing others. A dynamic assessment of the economic, social and environmental impact that different types of land-use and land development measures can create will help accentuate the progress that has already been obtained in the achievement of cross-national spatial planning policies.

## **VI. Way forward**

Options that could be considered at the international level include:

### **A. Inter-linkages among issues**

74. A holistic approach using national sustainable development strategies by addressing the inter-linkages among the issues of agriculture, rural development, land, drought and desertification has proved most successful. It is, therefore, necessary to formulate policies in such a way as to build institutional capacity, including intersectoral cooperation, to include these issues in the national sustainable development strategies and into other development plans, especially in Africa.

75. An integrated rural development should be encouraged by policies to enhance human and social capital through education and inclusive social participation, Building cost-effective, reliable, and affordable infrastructure services, strengthening the agro-industrial base with

market-oriented farming and small and medium-scale agro-enterprise development; promoting non-farm employment and improving access to finance and global and regional markets also contribute to rural development.

76. Sustainable agricultural development and sustainable land and other natural resources management, especially in Africa, contribute to poverty eradication, achievement of the Millennium Development Goals, food security and provide a path to sustainable development. Incentives should be established and barriers addressed to, sustainable natural resource management including through providing dryland areas with increased access to appropriate and affordable agricultural technologies, affordable credit facilities and links to markets; processing and value addition; developing physical, economic and social infrastructure; enhancing access to electricity and other alternative sources of renewable energy for the rural populations; and carrying out reform and/or effective enforcement of land and other natural resources regulatory frameworks to promote secure tenure and/or access rights to land, water and other natural resources.

77. Inter-linkages between this thematic cluster and other issues are also important. Water provides an important link to agriculture and rural development. Therefore, a community-participation approach for pursuing forward-looking management and development of water resources should be encouraged. Policies to reform the water sector must go hand in hand with policies to promote greater investments in infrastructure. In this regard, upgrade of aging infrastructure through investment is important, but it needs to be at the same time eco-efficient, avoiding environmental damage.

78. Climate change impacts can pose a threat to prosperity and security through social and economic disruptions. Adverse climatic conditions can also result in drought induced agriculture failure, diminished food security, heightened hunger and increased mortality. Policies should be, therefore, put in place by governments and other agencies to integrate response to these challenges. National governments need to develop effective drought early warning systems and integrate national and regional action programmes to combat desertification and drought into national development frameworks and poverty reduction strategies supported by strong institutional capacities and legal frameworks.

## **B. Cross-cutting issues**

79. Gender equality provides an opportunity for growth and poverty reduction. Policies need to be formulated to give women farmers access to land, to credits, to markets and market chains. Therefore, formation of women's groups to improve rights and access to services as means of social and economic empowerment in which members increase productivity and incomes collectively, should be encouraged. Budgeting processes that identify gender impacts and utilize needs assessment tools will help devise better policies. Mainstreaming gender issues into economic analyses and poverty reduction strategies and actions and providing technical training for women and girls helps women empowerment.

80. Pursuing sustainable patterns of consumption and production is essential to making progress in the thematic cluster of agriculture, rural development, land, drought, desertification and Africa. Support for enhanced consistency in national sustainable development strategies will result in greater economic resilience, lower energy intensities and lower energy costs per unit of production or consumption, with corresponding environmental and social benefits. Policies and actions to promote environmentally sustainable consumption patterns in relation to food, fuel, water and agro-industrial products are needed. Sustainable production (as in organic agriculture) can be supported through collaboration between developed and developing countries.

81. Creating an enabling international environment for integrating trade of developing countries into the world trade should be encouraged. Policies need to be formulated to help prioritize trade links to development and poverty reduction into national development strategies. Reducing tariffs and non-tariff barriers imposed by developed countries on agricultural products and textiles and clothing from developing countries as well as reforming domestic and export subsidies of developed countries is necessary. To this end, there is the need for successful and timely conclusion of the Doha Development Round. There is also a need to develop trade capacity building for developing countries, especially in Africa.

82. The interdependent relationship of land, agriculture, rural development, drought and desertification in small island developing States (SIDS), given their size, limited land and narrow natural resource bases and the fragility of their terrestrial and coastal ecosystems is very important. It is, therefore, necessary to strengthen human resource and institutional capacity for integrated rural development and sustainable management of natural resources taking into consideration culture and land tenure systems. Rural communities in SIDS face many challenges. Therefore, they need empowerment, participatory assessment and training to build their capacity for helping themselves including empowering of women and youth as part of rural development strategies in SIDS.

83. Primary health care is a key policy concern in rural areas. Good primary care requires teams of health professionals with specific and sophisticated biomedical and social skills. Often, primary care in rural areas is delivered by using low-tech and poorly qualified staff. Facilities must be funded, established and staffed so that rural populations will have access to adequate health services.

84. Increasing global public investment in rural education is necessary to bridge the education gaps between urban and rural areas. Training of qualified teaching staff and building of schools in every community will have long-term significant impacts in reducing rural poverty and achieving the Millennium Development Goals.

### **C. Means of Implementation**

85. Current global crises are seen by many, as having a negative impact on a number of sustainable development issues from widening of global socio-economic divisions, climate

change and resource competition to maintaining of security. Therefore, policies need to be devised to counter such trends through fair trade, debt cancellation, assistance for sustainable development, a radical cut in carbon emissions, rapidly increased use of renewable energy resources and the development of conflict prevention.

86. In current global environment, an adequate and predictable flow of financial resources has become even more important for implementing the intergovernmental agreements related to the six issues of this thematic cluster. Even though responsibility for decision-making, implementing and funding policy options and actions lie in the first instance with national Governments, bilateral support provided through official development assistance (ODA) and multilateral support from the Global Environment Facility (GEF) and international financial institutions (IFIs) should be encouraged. External resources are also vitally important in financing development. An increase in private capital flows is crucial to the attainment of sustained growth and development in developing countries. Foreign direct investment (FDI) in particular is needed to provide a boost to economic growth and to contribute to technology transfer, employment generation, and improved access to managerial expertise, global capital and product markets, and marketing and distribution networks.

87. Developing more efficient institutional mechanisms for better debt management and sustainability, and establishing a sovereign debt arbitration mechanism for countries under severe debt distress, especially in Africa, where there is a need for more fiscal space, should be encouraged in order to scale up public spending on education, health, infrastructure and poverty reduction to achieve the Millennium Development Goals. To this end, measures need to be put in place to help adopting a holistic approach to addressing the problem of governance and to improving public financial systems and management.

88. Technology transfer is important for realizing progress on all six issues of this thematic cluster and it could be promoted through increased technical assistance by developed countries and international organizations, including through support for joint research and development. Given the strength of the private sector's technical know-how, initiatives for technology transfer and diffusion could benefit from public-private partnerships. Transfer of technology and know-how could also be facilitated by encouraging FDI.

89. Capacity-building at the local and national levels is needed in order to achieve interdisciplinary expertise required to deal with challenges of this thematic cluster. Capacity-building programmes could be built into projects whether funded by government, bilateral ODA, IFIs or the private sector. Targeted capacity-building programmes could be implemented, in coordination with local and national institutions, in individual research institutions, universities and vocational schools. Strengthening South-South cooperation for building capacities is a potentially effective option for sharing information, knowledge and technical know-how. Capacity-building could also be facilitated by modern web-based electronic communications and improved access to libraries and electronic knowledge banks, as well as online networks and links to professional associations and experts.

90. Strong commitment to sustainable development also means strengthening of research and development (R&D) also through increase of national, international, and private sector investments in science, engineering and technology. Universities, research institutes and private enterprises all have an essential role to play in promoting research that supports efforts to ensure that economic and social growth and environmental protection reinforce each other. They should also contribute to low environmental impact management through interdisciplinary approaches and by building on existing networks. Creation of partnerships and cooperation between developed and developing countries' universities and higher education institutions, encouraging networking and peer learning, should be promoted.