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THE ROLE OF AGRICULTURE AND RURAL DEVELOPMENT IN REVITALIZING ABANDONED/DEPOPULATED AREAS

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I. INTRODUCTION

1. The following document is an attempt to address the problem of abandonment and depopulation of rural areas[1] and to analyse the different policy options that exist to address revitalization in the pan-European context. The document focuses mainly on transition countries, but uses the experience from western European countries for defining possible policy options.

2. *Land abandonment* is a process, whereby human control over land (e.g. agriculture[2], forestry) is given up and the land is left to nature. After a number of years, depending on the ecological zones and climate, land can be considered as completely "abandoned", when either legal (e.g. forest law) or natural conditions (e.g. desertification, overgrowth with forest) render a restoration for agricultural use impossible or too costly.

3. *Depopulation* is a process, whereby the resident population is leaving the area and the population density is falling below a critical level so that any socio-economic activity is hindered by the lack of people to maintain infrastructure and basic services.

4. The abandonment of agricultural land can be linked to natural factors (e.g. altitude, slope, climate, remoteness, etc.), combined with socio-economic factors (e.g. land ownership, lack of competitiveness, difficult access, unfavourable market forces, etc.) and institutional factors (e.g. inadequate policy framework, etc.), which render agriculture or forestry non-profitable. The reduction of agricultural and forest activities results in many cases in the abandonment of other economic activities (*e.g. services in rural areas, such as shops, health services, etc.*), in particular in remote rural areas. Hence, land abandonment may lead to depopulation and in general terms to a degradation of the ecological and economic value of an area.

5. In order to reverse this trend, market led solutions are not always feasible in the above-mentioned context of low economic potential, since the area cannot economically compete with other areas. In this case the community (i.e. policy-makers) may decide to leave the area to its own fate (i.e. do nothing), or the community may assign a non-monetary value to the area or may value its function as a public good, which makes it profitable for the community to sustain the area. As this happens predominantly through supporting specific economic sectors or activities (i.e. subsidies), it is contested by liberal economists and does not comply with some of the WTO regulations. Even if in recent years agricultural and rural development policies have adjusted to this criticism and have become more free-trade compatible (e.g. Common Agricultural Policy (CAP) Reform) there is still pressure on further reforming these policies. There is also growing demand for maintaining the socio-economic viability of rural areas, in particular in remote and mountainous locations, which calls for a combination of different sectorial and rural development policies compatible with international rules and regulations.

6. In this process, FAO has a crucial role to play as a neutral body and broker of knowledge, by providing support to member governments to devise efficient and internationally compatible policies for revitalization of abandoned land and depopulated areas, including programmes and activities at field level.

7. The objective of this document is to demonstrate how agriculture and rural development can contribute to the revitalization of abandoned land and depopulated areas, and to identify

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[1] In the context of this paper, rural areas are characterized by a population density below 150 persons/km^2. See document ECA 34/06/2-Sup.1 Annex 1 for the most commonly used definition by the Organisation for Economic Co-operation and Development (OECD).

[2] For the purposes of this document, agriculture refers to all related activities, e.g. crop and livestock perennials, pastures, etc.

appropriate rural and agricultural policies to stimulate the development of these territories, i.e. targeted revitalization policies.

II. ABANDONMENT AND DEPOPULATION: FACTS AND MAIN CAUSES

A. FACTS

8. Over the past ten years it is estimated that agricultural land equivalent to the size of France has been taken out of agricultural production in Europe. However, there are large differences between countries. Countries like Armenia, Croatia and Norway had an increase in arable agricultural land of between 10 to 30 percent. Conversely, countries like Estonia or Ireland have lost 50 and 23 percent of their arable land, respectively. There are also other indicators such as population density, which reveal clear trends, such as migration of people from rural to urban areas and from remote and peripheral regions to large towns and capitals.

The reasons for abandonment of land are multidimensional and can be differentiated as follows: natural constraints, land degradation, socio-economic factors, demographic structure, and institutional framework .

B. NATURAL CONSTRAINTS

9. Among the most important factors for land abandonment are the natural constraints for agriculture and forestry, such as the topography (e.g. slope), climate and altitude, as well as the quality of soil, including its water retention capacity. Regions where several of these factors are present are at highest risk for abandonment of land. This is particularly the case for arctic and mountainous areas.

Land abandonment occurs mainly in regions where natural conditions are difficult.

C. LAND DEGRADATION

10. A second important reason for land abandonment is land degradation[3]. Degradation, particularly through desertification is a global problem. More than 70 percent of the world's dry land is affected by degradation caused mainly by overuse or inappropriate use of land and climatic fluctuations and trends (e.g. lower precipitation). It is estimated that up to 50 000 ha of land is lost yearly as a result of desertification. In Central Asia the total area of land affected by desertification, mainly due to overexploitation, is more than 107 million ha. It is anticipated that climate change could increase the desertification in this region bearing in mind the assumption that the decrease in precipitation is continuing. The Aral Sea is an explicit example of how inappropriate land use and agricultural technology can severely affect natural resources, causing irreversible damage and negative socio-economic consequences.

11. Deforestation in fragile areas is a particularly important trigger of desertification. Soil erosion is the main cause of desertification in the Mediterranean area. In southern and northern Europe, extreme climatic conditions (e.g. dryness and artic climate, respectively) in combination with inappropriate land use can reinforce land degradation.

In fragile areas land abandonment is the consequence of inappropriate land use practices.

[3] Degradation is caused by human activity and long-term climatic fluctuations and is a gradual process of deterioration of physical, chemical and biological characteristics of soils, which leads to diminishing soil fertility and loss of the biological productivity and economic value of land.

D. SOCIO-ECONOMIC FACTORS

12. Socio-economic factors also play a significant role in decreasing the population of remote regions because they are the main elements affecting the migration of the rural population. Technical progress resulting in an increased mechanization of agriculture has enabled rapid agricultural development over the last 60 years. With the increase of production, prices for agriculture commodities decreased. However, the disparities among regions have increased. Mountainous, arctic, and drier areas face particular difficulties on global markets, since production costs in such areas are higher and transportation infrastructure is less developed, hence marketing and processing are constrained. *The lack of agricultural competitiveness* is therefore a major factor of depopulation in areas where agriculture and forestry are the main economic activities. Diversely, in regions with important urban or tourist centres, possibilities of off-farm employment are high and part-time farming becomes important.

13. The *transition process* in Central and Eastern European and Commonwealth of Independent States (CIS) countries has brought fundamental *cultural, social and economic changes.* These not only affected the economic relationship between producer and consumer (i.e. change from planned to market economy) with a substantial shift in relative prices, but also negatively affected social relations and cultural values (see para F. Institutional Framework).

14. In many countries of Eastern Europe, the *lack of rural finance* is one of the main reasons why farmers cannot invest in improving or expanding their production base and become more competitive. Furthermore, the downstream and upstream sector (e.g. input supply, processing, etc.) is affected by the lack of credit. These sectors are of importance for the creation of non-farm income opportunities.

15. The *lack of public infrastructure*, e.g. roads but also “soft” factors like how well markets and public institutions are developed and performing are of significance for the “*territorial competitiveness*” of a region and therefore influence the migration of the population.

16. In most transition countries farming is not considered a real profession. This leads to a *negative image of agriculture* and to the perception that people become farmers "because they were not able to do anything else". This can have a negative impact on the resources allocated to agriculture and on national strategies in support of the sector. Decision-makers might consider agro-industry as the driving force of the sector in place of family farms. A negative image will eventually further encourage potentially successful farmers to abandon the activity and move to other sectors. This negative selection process will certainly impact in marginal areas more than in those areas where intensive agriculture is more economically rewarding in the short term.

Land abandonment and depopulation can result from a lack of competitiveness, a lack of rural finance, a lack of public infrastructure, the overall economic context of a country (territorial competitiveness), and a negative social image of agriculture.

E. CHANGE IN DEMOGRAPHIC STRUCTURE

17. An ageing European population contributes to further abandonment of land and depopulation. The lower the proportion of the economically active population in an area, the lesser the chance of reversing the economic decline. Depopulation leads to a neglect and ultimately to a loss of infrastructure (schools, shops, processing facilities, etc.), which in turn accelerates the out-migration from rural areas, particularly of the young, dynamic and innovative people.

Depopulation occurs as a consequence of change in the demographic structure.

F. INSTITUTIONAL FRAMEWORK[4]

18. In Europe and in particular in Central and Eastern Europe, the globalization of the economy and the transition to a market economy brought about changes in the institutional framework governing the functioning of the society, resulting in a loss of traditional *social patterns and values* (see also para D. Socio-economic Factors).

19. This development, even if it is part of a general trend towards individualism in modern societies, has particular negative effects in rural and remote areas, since it results in a change of *community values* in favour of *individual values*, leading to a loss of motivation for living in rural areas and a desire to leave a difficult economic situation and try to access an easier urban way of life, despite high unemployment in cities. The consequent lack of young and motivated people contributes to an incapacity of rural and remote communities and individuals to maintain existing, or create new institutions and enterprises.

20. In addition, *traditional knowledge* on how to manage agriculture and forestry (e.g. community pastures, traditional irrigation systems, etc.) is gradually lost, because the older generation no longer employs traditional practices and there are no young people to continue. In addition, there are insufficient educational opportunities for learning new skills and technologies in order to develop new income-generating activities in rural areas (e.g. related to rural tourism, handicrafts, etc.).

21. An *inadequate policy framework* may also result in abandonment of land and depopulation. The transition countries face difficulties regarding land ownership (registration), insufficiently defined property rights, and the lack of operational land markets. This prevents the reconstitution of viable farming units through land consolidation. Accordingly, concerns relating to land ownership and distribution can be considered one of the major causes of land abandonment in the Central and Eastern European (CEE) and CIS countries. This situation has often prevented farmers from making long-term investment decisions.

22. On the contrary, with the further liberalization of agriculture markets and agriculture policies, support measures (e.g. subsidies) that are being provided to agriculture and that support rural development in marginalized areas (the European Union, Norway and Switzerland) will need to be further scaled down. A further reform of these policies could lead to an increase in farm size in agriculturally favoured areas and an increase in the abandonment of land in marginal areas.

The change of institutional frameworks may lead to an increase in depopulation, and in addition, insufficient policy support may lead to abandonment and depopulation of less favoured areas.

III. IMPACTS OF LAND ABANDONMENT AND DEPOPULATION

23. At the policy level, different opinions prevail regarding the impact of land abandonment and depopulation and on how to respond to it. For example, a measurable impact, such as overgrowth with shrubs and trees may be seen as negative, when it leads to scarcity or even the loss of land or landscapes with a certain characteristic. However, it may be seen as neutral or even positive, when there is abundance of land and no specific value attached to a landscape. Without generalizing, due to its geographical and ecological characteristics (e.g. landscape diversity and scale), the first view is predominant in the EU and Japan, whereas the second is more prevalent in Australia, Canada and the USA. In transition countries and in developing countries the policy standpoint is more linked to economic impact than to other issues.

[4] In the context of this document “institutional framework” refers to formal institutions (e.g. government, administrative rules, legal framework, etc.) as well as informal institutions (e.g. social values, ethical or religious values, traditions, etc.).

A. NEGATIVE IMPACTS

a) **Environmental impacts**

Land degradation

24. Land degradation can occur as a result of two processes, the first being inappropriate land use and the second land abandonment. However, the two processes are closely interlinked and can reinforce each other.

25. For example, erosion of soil increases with deforestation and inappropriate cultivation practices. Also inappropriate cultivation and irrigation practices can lead to soil degradation, salinization and irreversible desertification and ultimately to abandonment.

26. Abandonment of land can have direct or indirect impact on land degradation. For example, in high mountain valleys, forests have an important function in preventing avalanches and slope erosion (protective forests). They protect the villages and infrastructure in the valley bottom, as well as downstream by guaranteeing a constant and clean water supply and preventing floods. Hence, a reduction in forests in mountain areas can diminish their conservational function and increase degradation. In Mediterranean drier regions the abandonment and loss of pastures and consequent overgrowth with shrubs increases the danger of uncontrolled fires, thus increasing soil erosion and land degradation.

Land degradation can be the consequence of inappropriate cultivation practices and/or abandonment of land.

Landscapes

27. Besides the natural geographical characteristics, agricultural and forestry activities are the dominant factors that influence and change a landscape. Land abandonment and depopulation lead to a reduction of this external influence and the landscape may return to its previous state prior to the advent of human activity, may convert to a new landscape or land degradation may occur.

Depending on which of the three possible developments occur following abandonment, the value of a landscape may increase (e.g. conversion into a "national park" or decrease (degradation)).

Biodiversity and genetic resources

28. In addition to their important intrinsic value, biodiversity and genetic resources are also an important resource for improving agriculture, medicine, and industrial products. Land abandonment leads to a loss in biodiversity over time from the perspective of both habitats and species.[5] Different cultivation practices lead to different intensities of biodiversity, e.g. in extensive and diversified farming systems it is normally high, whereas in intensive and monoculture farming systems, biodiversity is generally low. In addition, biodiversity (i.e. the interplay of different species and habitats) depends, like the landscape, on human care or influence in order to be maintained (e.g. pastures, wetlands, etc.).

Land abandonment can lead to a substantial loss in biodiversity and genetic resources with negative consequences for future research and development.

b) **Economic impacts**

29. Land abandonment contributes to a decrease of agricultural (and other) values attributed to the land, the loss of infrastructure related to agriculture and forestry, e.g. rural roads, irrigation systems, etc., and may decrease its potential for tourist and recreational activities. After a number

[5] Generally biodiversity increases immediately after the cessation of cultivation practices, however, in the medium- to long-term it decreases. For example, after periods as short as three years, abandoned areas can lose up to 25 percent of their species.

of years, depending on the ecological zones and climate, natural conditions (e.g. desertification, overgrowth with forest) can render a restoration for agricultural use impossible or too costly. [6]

Land abandonment can substantially reduce the value of land.

c) **Social impacts**

30. Land abandonment and out-migration can lead to further isolation and marginalization of vulnerable rural populations. It contributes to an unbalanced demographic structure, the loss of knowledge and tradition of land management, the disappearance of social and community values and structures as well as increased health issues including depression and alcoholism.

31. Out-migration from rural areas leads to an increase in social costs in urban areas. The poorer inhabitants of rural areas migrate to urban peripheries, which are often already pockets of deprivation. The provision of social services (e.g. education, health care, care for ageing people, etc.) in rural areas is generally more costly and some countries are forced to discontinue providing these services for budgetary reasons. Welfare is therefore decreasing at the social level.

Land abandonment and out-migration can lead to further marginalization of rural and remote areas and aggravate the social problems in urban areas.

B. POSITIVE IMPACTS

32. In the context of agricultural overproduction in Europe and subsequent environmental and economic problems, environmental groups advocated and continue to advocate for more extensive land use, sustainable management of rural landscapes, and protection of natural resources. In fact, in Europe, this pressure by environmentalists and the general public has led to nature preservation oriented revitalization policies, such as NATURA 2000 in the EU.[7] Such programmes have led in some areas to an extensification of agricultural practices and as a consequence to a relative increase in biodiversity, where areas of intensive production have been abandoned. However, this is generally not the case, and moreover, abandonment usually occurs on marginal lands that are often of high natural and cultural significance.[8]

33. Nevertheless, in some very special circumstances land abandonment can produce environmental benefits which include contributing to water accumulation and flood control, nutrient recycling and fixation, soil formation, carbon sequestration by trees and soil, wildlife and biodiversity protection, the provision of recreational services and the enhancement of aesthetic value.

Pressure by environmentalists and the general public in the EU and Switzerland for example, is leading to extensification and a certain degree of land abandonment, which can have a positive impact on the environment and landscape.

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[6] As an example, the estimated value of paddy fields in Japan has been assessed at a level of US$39 billion. The main functions valued are: prevention of flooding and reduction of damage, preservation of rural landscapes and provision of recreational amenities.

[7] The NATURA 2000 programme identifies European sites of interest as habitats for fauna and flora. Protected agricultural sites make up 15 percent of the terrestrial part, i.e. 2 percent of the EU-15 territory is protected agricultural land due to its high natural value.

[8] An interesting contrast emerged between the Irish perspective on commercial (conifer-dominated) forestry as an impact/output/symptom of (agricultural) abandonment, while in Scandinavia (e.g. Sweden) reforestation is considered as an option for dealing with agricultural land abandonment. This highlights the difference between the 'agricultural' abandonment of land and actual 'land' abandonment (which involves a cessation of all human use of the land). Both scenarios – abandonment and reforestation – may however have serious implications for natural and cultural heritage.

IV. THE ROLES OF AGRICULTURAL AND RURAL DEVELOPMENT

A. THE IMPORTANCE OF AGRICULTURAL AND RURAL DEVELOPMENT

34. Rural and agricultural development and equitable distribution of the benefits of economic growth are crucial for the global reduction of poverty and hunger. Numerous studies have provided evidence that the impact of economic growth on reducing hunger and poverty depends as much on the nature of the growth (e.g. industrial or rural economy based) as on its scale and speed. For example, a World Bank analysis of data from India, found that growth in rural areas and in the agriculture sector had a much greater impact on reducing poverty than did urban and industrial growth. Other studies that analysed the relationship between growth and reduction in hunger revealed a similar pattern. These and other examples tend to support the conclusion that *economic growth in the agricultural and rural sector has a much greater impact in reducing poverty and hunger than do urban and industrial growth*.[9]

35. Another issue related to agricultural and rural development is the necessity to increase agricultural production in order to provide sufficient food for an expanding population in food deficient regions in developing countries. Conversely, in regions with overproduction, often incentivized by agricultural policies and subsidies, the concerns are how to reform these policies in order to enable free trade in agricultural commodities (and release the taxpayer/consumer from the high related costs), with a new policy focus on maintaining rural areas intact. As world energy crises are anticipated to remain at high levels, production of biomass based energy and raw materials are an important task for the future and present an alternative for the European agricultural sector.

36. The rural economy plays an important role with regard to employment, since the economic growth in urban centres is too slow to generate sufficient *employment* to absorb the migrated labour force, particularly in transition countries. The contribution of agriculture is obvious in rural areas where it is one of the major economic activities, although small semi-urban centres play a major role in the economic growth of rural areas. Therefore, employment in rural areas may depend heavily on agriculture and related sectors, especially in areas where tourism and the incentive to invest in industry are very low.

37. The efficiency and competitiveness of the rural sector is dependent on a coherent approach regarding *land tenure*. *Land fragmentation* is an important factor affecting many transition countries and its resolution through land consolidation would give young farmers, in particular, an incentive to invest in their holdings and to remain in rural areas.

38. Agricultural activities can be crucial in the preservation of *natural resources*. By maintaining agricultural and forestry activities, environmental risks can be reduced and direct economic damage caused by avalanches, landslides, forest fires, etc. can be prevented. In addition, in regions where tourism is an important economic factor (e.g. mountainous regions of Austria, France, Switzerland, etc.), maintaining the landscape intact is essential to keep the tourism industry operational.

B. THE CONCEPT OF RURAL DEVELOPMENT

39. The concept of rural development has been conceived as a response to the increasing external pressure on rural communities. In the past, rural communities were able to react by increasing specialization to take advantage of comparative advantages and economies of scale. However, globalization and increased competition from other areas in the same country or from

[9] "The State of Food Insecurity in the World", FAO 2005.

another part of the world, make this strategy less and less successful. The actors in rural areas need to apply new strategies, based on mobilization and the interconnection of different fields, i.e. economy of scope[10]. Agriculture, environment, water, energy, local handicrafts, agro-tourism and tourism, organic agriculture, local products[11], direct on-farm sales, heritage and patrimony, have to be combined in order to form a new, territorial based, production system. Therefore, it is necessary to redefine identities, strategies, practices, and networks within the territory to overcome the current model of organization by single commodity chains and sectors and redefine the *territory as a competitive production unit based on economies of scope*.

40. Over the last ten years this has led to an evolution of the concept of rural development along three axes:

- *Social values* are fostered, such as inclusion (stimulating participation of all members of society) and equitable distribution of advantages[12];
- *Endogenous development*, which highlights the fundamental role of participation by local communities in the formulation of objectives[13];
- *Sustainable development*, where local human resources (know-how, traditional local knowledge, organization, etc.) and natural resources (soil, water, biodiversity, etc.) are respected and valorized and social structures and networks (wellbeing, access to social services, etc.) maintained.

41. An OECD report concerning the future of rural policy concluded (OECD, 2006) that the major shift necessary to guarantee the future vitality of rural regions is the diversification of the rural economy. The paper provides a new approach that recognizes the importance of the interdependence between rural and urban areas, fostering investment, rather than distributing subsidies. This approach also emphasizes governance structures that get the local population involved in grassroots initiatives to develop and implement new policies.

42. These new developments reinforce the self-esteem of rural communities as well as their visibility with regard to urban communities. This is important, since these urban communities are usually the main sources of income due to their purchase of goods and services offered by the rural economy, as well as through their acceptance of rural development policies and direct financial support for the production of public goods by rural areas.

43. In practical terms, in particular in remote areas, in order to contribute to rural development and to be sustainable, farming needs to be based on generating added values from a wide number of resources. An efficient strategy is to include “normal” downstream and upstream activities on the farm, such as transformation (processing) and direct sales or to add other farming-related activities, such as forestry activities, work for the municipality, agro-tourism, or provision of other private or public services, etc.

C. THE STRUCTURE OF RURAL ECONOMIES

44. From the perspective of sustainability, the agricultural and rural economy supports the preservation of natural resources and assists in preventing rural poverty, in particular during times of crisis and the periods of economic transition in Central and Eastern Europe. This was particularly important during the early transition process, when social and economic relations between producers and consumers of the planned economy were suddenly interrupted and exchanged for dynamic and changing relations based on price mechanisms. This immense change

[10] Ploeg et Roep, 2003.

[11] Protected Designations of Origin – PDO, Protected Geographical Indications – PGI, etc.

[12] Di Iacovo, 2003.

[13] Lowe *et al*, 1995 ; Murdoch *et al*, 2003.

in the institutional framework had significant implications for agricultural and rural development, resulting in a decrease in production and consumption in transition countries in the early 1990s.

45. In regions that have no alternative resources available for territorial development, agricultural development is essential for the economic growth of the area. Studies have been undertaken to measure the influence of the agricultural sector on the economy in terms of its multiplier effect, i.e. how much one unit of added value in the agricultural sector is generating in the other sectors downstream and upstream of the agricultural sector. For example, in 2001 in Switzerland, the creation of added value linked with agricultural production, was six times greater than the direct added value of the agricultural sector.[14]

D. AGRICULTURE AND RURAL DEVELOPMENT

46. Rapid changes in agricultural markets lead to complete reassessments of the role of agriculture. Previously agricultural policy was considered as a sector policy and its primary objective was the increase of production. However, recently, some countries (e.g. the so-called "G20", "CAIRNS" group, developing countries) have strongly criticized the agricultural policy of the European countries and demanded an end to production oriented subsidies to the sector. In particular, these countries requested a revision of the "green box" exemptions in the WTO regulations, claiming that these represent a distortion of competition and prevent many developing countries from fully developing their agriculture sector.[15] Instead, another group of countries (mainly the EU, Japan, Norway and Switzerland) claim that agriculture has to be considered from a holistic point of view. These countries argue that a purely production-oriented view of agriculture, i.e. as a mono-functional activity driven by globalized food supply chains and global competitiveness, is insufficient considering the reality of agriculture in most European countries, especially in mountainous and remote areas. In the perspective of rural development, agriculture has a lead role to play in the economic welfare of a region due to its impact on different sectors: economic (income), social (employment, quality of life, health) and environmental (landscape, biodiversity, preservation of natural resources, and carbon sequestration), in addition to its importance as a provider of primary raw materials for the food and other industries (foodstuffs, fibres, bio-fuels, and timber).

The challenge for a reform of agricultural and rural development policies is to make them compatible with the rules and regulations under WTO and other international commitments.

V. REVITALIZATION OF RURAL AREAS

47. Taking into account the reasons for land abandonment and depopulation, there are different opportunities for intervention for revitalization with varying probabilities for success, e.g. natural constraints cannot be influenced but can only be compensated for, degradation processes can sometimes be reversed through technical interventions, demographic development can only be influenced to a limited extent, and socio-economic factors and institutional frameworks can be addressed by appropriate policies, however, sometimes these generate undesired side effects.

A. TYPES OF REVITALIZATION

48. Different situations regarding revitalization of rural areas can be distinguished with relation to two main factors: the density of the population and the agronomic potential. In the case of a desert, both the density of the population and the agronomic potential are nil. In other circumstances, revitalization policies face different contexts, pursue different goals and can

[14] Swiss Federal Office for Agriculture, 2004.

[15] WTO regulations allow certain exemptions to the free trade rules. These are defined in the so-called "boxes"; e.g. green box for agriculture.

implement different tools. However, these situations are not mutually exclusive and should be seen as a continuum.

Revitalization through nature – preservation of biodiversity (agronomic potential and population density low)

49. In rural areas where the agronomic potential and density of population are very low, the main concern of the revitalization policy is the preservation of nature. The most interesting examples of that approach are the Natural Parks in the USA, where no human intervention is allowed and nature is protected from any human interference, even from tourists in certain cases. This prevalence of nature preservation is not easy to manage in Europe where the institutional patterns are long-established and present everywhere. Furthermore, the patrimonial and cultural dimensions of cultivated landscapes are more prevalent in Europe than in the USA because of a longer agricultural history. The challenge is to resist the economic pressure for exploitation through other means (e.g. flooding for hydraulic power generation). The main objective is to maintain nature as much as possible undisturbed.

Revitalization through recreation – preservation of quality of life and biodiversity (agronomic potential low, population density medium to high)

50. There are rural areas with a low agronomic potential and average to high population densities. Land prices are high due to economic pressure from tourism and nearby towns. In these areas, the main role of agriculture and forestry is to maintain the landscape and to protect the recreational areas (against avalanche, fire, etc.). Rural development is strongly integrated into agricultural policies and territorial management, where rural land ownership laws play an essential role in limiting land price pressures. The development of local food production and short supply chains, taking advantage of high population densities, is a main axis of policy. The challenge is to create a rural economy based on economies of scope and to exploit the territorial competitiveness. The main objective is to keep agricultural activities operative.

Revitalization through economic development – develop rural areas for economic reasons and create synergies with other sectors such as the agro-processing industry and tourism (agronomic potential high, population density low)

51. These rural areas have a normal to high agronomic potential and low population density. There are many stakeholders in the revitalization process: farmers, landowners, the tourism industry and tourists, the agro-food industry, local communities, regional authorities and national government, civic society and NGOs. The main issue in these regions is to obtain a political consensus regarding the necessity for a revitalization process based on agricultural and rural development. The challenge is to transform a primary sector based economy into a highly diversified, secondary and tertiary sector based rural economy (i.e. agro-industry and services such as food processing and marketing, rural tourism, etc.) The main objective is to maintain a satisfactory population base in the rural areas.

52. Areas with a *high agronomic potential and a high population density* are, with the exception of some highly productive farming systems in Asia, mostly urban or peri-urban areas with little (high intensive and commercial gardening or home gardening) or no agricultural activities and the problems are more related to environmental pollution and degradation of the landscape, therefore no revitalization policies are required for these areas.

B. OPTIONS FOR REVITALIZATION INCENTIVES

53. Revitalization implies defining and implementing incentives that will convince the economic actors in rural areas (e.g. farmers, forest managers, etc.) to invest and to produce. Two main sets of options for interventions can be distinguished:

– *Market based incentives*:

  Policies that give the right *price signals* to the market, through incentive policies that foster fair competition, property rights and create an enabling institutional environment for markets to work (e.g. functioning land markets, support to land consolidation, etc.).

– *Public goods based incentives*:

  Compensatory payments for the production of public goods and services, such as positive externalities (clean environment), preservation of natural resources, compensation of natural constraints, etc. This option is widely used in the EU, Norway and Switzerland. Compensatory direct payments permit a supplementary incentive without any direct market intervention.

54. However, revitalization policies are dependent on an enabling macro-economic environment and an appropriate institutional framework and should be an integral part of specific sectoral policies, especially agricultural and rural development policies.

C. ECONOMICS AND POLICIES OF REVITALIZATION

55. For many years, maintaining and revitalizing rural areas has been a primary concern of agriculture and rural policy makers. The following section describes the currently available set of necessary, but not sufficient, policy options that should compose an efficient and effective policy mix for agricultural and rural development.

56. An important step in developing and implementing policies is a participatory process involving all concerned actors. This process with the involvement of both government and civil society at the national, regional and local level is crucial for the success of any new policy approach to revitalization.

a) Enabling macro-economic environment, institutional framework and policies

57. *Macro economic environment*: In order for revitalization policies to work, macro-economic conditions (e.g. interest rates, exchange rates, taxation, cost of labour, etc.) and the institutional framework have to be such to enable the economic actors to benefit from the policies.

58. *Market access*: Markets (local and national) must be efficient in the way that no unfair competition hinders production (e.g. exchange rate does not penalize domestic production); prices must cover the costs and be appropriate for all producers and consumers (e.g. interest rates are not penalizing rural areas). Without this basic condition of equitable prices, all other measures will lead to inefficient policies.

59. *Property rights policy*: The protection of genetic resources, local traditional knowledge and access to natural resources (e.g. water rights, mineral resources, etc.) is an important condition for rural development. In that context, national regulations regarding geographical

indications[16], prohibition of patents on plants or animals[17], and the protection of local knowledge[18] are fundamental.

60. *Land reform and land policies*: Land tenure policy and, in particular support to land consolidation, is an important precondition for developing a competitive agricultural sector, as it directly affects the efficiency and competitiveness of the rural sector. In many transition countries the resolution of widespread land fragmentation would give an incentive, in particular to young farmers, to invest in their holdings and to remain in rural areas. In addition, the creative management of state and publicly owned land, where such land is available, can provide a welcome opportunity to address the land tenure situation.

61. *Governance, decentralization and participation*: Empowerment of people in rural areas should be one of the basic elements of any revitalization policy. It should include clear rules and guidelines for decentralization in decision making as well as in financial concerns (i.e. use of taxes), participation and empowerment of local people, positive discrimination for marginal groups and institutional development to ensure good governance at local level.

62. *Social and labour policies*: It is particularly important to maintain a balanced demographic structure for a balanced economy through targeted support for keeping young people and families in rural areas. Specific policies targeting *landless agricultural and rural workers* are a challenge, because increasing mechanization to become competitive obliges a large number of these landless labourers to leave the sector. These policies should aim to create remunerative, decent and stable employment opportunities in rural areas, whereby employment and education programmes are important elements.

63. *Other social, welfare, and fiscal policies*: Public and animal health, water supply, environmental policy, etc. are of primary concern for any revitalization policy. Fiscal policy must be based on an efficient, decentralized and income-based taxation and take into account the priority needs of the country (e.g. redistribution of tax income to disadvantaged areas).

64. In addition, special attention should be given to improving social and cultural amenities, services and infrastructure in order to stimulate social and cultural revitalization, and especially to engage young people in the revitalization process.

b) **Agricultural, forestry and environmental policies**

65. At the agricultural, forestry and environmental policies level, direct payments for the compensation of natural constraints, for the preservation of natural resources, provision of environmental services and the production of other public goods are the main support measures. These are normally sustained by appropriate land ownership laws, support to land consolidation, measures to reinforce the family farm model, and more traditional (e.g. production subsidies, etc.) agricultural sub-sector policies, etc. In order to avoid the capture of land rent through direct payment schemes, laws on land ownership and lease have to be adapted.

Direct payments for the preservation of natural resources

66. The European Parliament supports the view that land abandonment damages the preservation of the environment in rural areas[19]. Antecedently, the 1992 “MacSharry” reform of the Common Agricultural Policy (CAP) of the EU included an agri-environmental scheme. Apart

[16] http://www.wto.org/english/tratop_e/trips_e/gi_e.htm

[17] Article 27 of the WTO Agreement.

[18] http://www.wto.org/english/tratop_e/trips_e/art27_3b_background_e.htm

[19] “In Europe the abandonment of farming would damage biodiversity and would not normally lead to the restoration of the original landscape. The problems created by both the intensification and the abandonment of farming therefore raise questions about the relationship between agriculture and the environment and the future basis for the European model of sustainable agriculture.” (European Commission, 2002: Agriculture and the Environment).

from measures related to input use, land use, rare and endangered breeds, biodiversity and landscape maintenance, this reform also included specific support for under-used and abandoned land.

67. Direct payments to farmers are a major issue under discussion with regard to the preservation of natural resources:

- Landscape conservation and amenity – there will be ever increasing demands for amenities by urban populations (also in the case of revitalization for recreation): the direct support of rural populations and agricultural or forestry land use is an efficient way to achieve that goal.
- Biodiversity – remote and vulnerable areas often have low agricultural potential, and consequently are rich in natural values. If a price can be agreed upon for these public goods, appropriate and WTO compatible payment/support systems can also be devised.
- Natural hazard mitigation – in some areas maintenance of protection forests, natural pastures, and other forms of cultivation are crucial for preventing or diminishing potential damage through natural disasters such as floods and fires.

Landownership and land lease

68. Landownership permits access to loans and capital in order to build the necessary infrastructure, purchase machinery and implement techniques to improve production. Agrarian reforms are necessary for agricultural and rural development, including support to land consolidation. The family-based farming model is considered to be economically efficient and capable of dealing with climatic and market risks, because farming families pursue other goals beyond the economic logic of profit, such as the safeguarding of the family heritage (e.g. land, buildings and tradition), a high motivation for the profession and a high quality of life in nature.

Sectorial agricultural and forestry measures

69. Sectorial agricultural and forestry measures should concentrate on the following main issues: technical development, access to funds for investment (public and private loans) and market organization. Technical and financial support for diversification into the production of non-food products - including forestry, bio-fuels etc., or energy production - wind, water or solar energy, etc., are useful in certain regions.

Research, extension, and agricultural advisory systems

70. Capacity building and training of land managers and rural communities is necessary. Research, extension and advisory systems have to be strengthened, to address agricultural and forestry problems and associated socio-economic problems of the rural sector and to increase competitiveness of agricultural production. Research is required to reduce the negative impact of natural hazards, droughts, floods, forest fires, and poor agricultural management on land degradation and desertification, resulting in abandoned land that is often characterized by salinized, dry, sterile, and unproductive soils. Multi-disciplinary research and extension capacity is needed for the development of improved technologies and management systems for high-value food and non-food crop production, as an integral part of other agricultural and non-agricultural rural income and environmental activities. There is a need for more technical and scientific cooperation among European countries on research in these areas of regional relevance, and on the development of efficient extension strategies.

c) **Rural development policies**

71. Rural development policy must embody region-specific approaches that cover all activities, are multi-sectorial, including farming and other rural activities, and are implemented in a participatory and transparent manner. The EU funds rural development under its second pillar, specifically supporting the synergies between agriculture and other activities in less favoured areas. In its next programming period (2007-2013) the proposed rural development programme

will be composed of four axes[20], of which one is the LEADER+[21] programme as a cross-cutting and integrating element. In addition, FAO's SARD M[22] programme is devised as an integrated approach, cutting across disciplines and technical units. Partnership initiatives are also an important tool in this context.

72. Rural development should support diversification (off-farm activities such as agro-tourism, direct selling, etc.) and the valorization of products within and outside the region (organic food, geographical origin, etc.). Remote areas have a specific competitive advantage in these types of production, thanks to the high intrinsic value of their landscapes and human habitats (cultural heritage) and the specificity of their traditional products.

73. *Diversification of income* in rural areas includes the following:

- Tourism – growing niche markets such as rural tourism, eco-tourism, adventure tourism, cultural tourism, green tourism, hunting, outdoor sports, etc.;
- Profiling of local products (branding and labelling);
- Housing – second homes and hobby farmers;
- Biotechnology – new technologies (breeds, feeds, crops, etc.) to support increased land use levels while maintaining or enhancing farm outputs;
- Public and private services that can be handled by the farmers themselves, who can be employed part-time for rural road and hiking track maintenance, waste treatment, postal services, school transport, etc.

VI. REVITALIZATION POLICIES – RECOMMENDATIONS AND FAO'S ROLE

74. In order to find the right *policies for revitalization*, a systematic approach has to be followed and different options for revitalization of rural areas defined. Revitalization policies have to be tailored according to the situation and needs in the rural areas.

75. The following set of *generalized policy recommendations* can be given, however, the situations described should be seen as a continuum and not as mutually exclusive.

Revitalization for nature – preservation of biodiversity:

76. First priority should be given to policies that compensate the production of a *public good* and as second priority, policies that foster *diversification* in order to benefit from the nature potential through rural tourism, organic farming, collection of non-wood products, etc.

Revitalization for recreation – preservation of quality of life and biodiversity:

77. *Market based incentives* have highest priority in these areas. As second priority, the production of some *public goods and services* has to be compensated in order to make the revitalization sustainable.

Revitalization for economic development – develop rural areas for economic reasons and create synergies with other sectors

78. In these areas, price mechanism should play the major role; combined with diversification these policies should enable the rural economy to become the engine of a sustainable revitalization of the area. There are only a few public goods functions that would have to be compensated.

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[20] See document ECA 34/06/2-Sup.1, Annex 2.

[21] LEADER, see document ECA 34/06/2-Sup.1, Annex 3.

[22] SARD M, see document ECA 34/06/2-Sup.1, Annex 4.

79. This set of recommendations has to be seen as part of a general policy framework. Such a general policy framework should be integrated both vertically (international, national and regional) and horizontally (intra and inter-sectoral) and encompass, *inter alia*, an enabling macro-economic environment, an institutional framework and policies, decentralization and participation, agricultural, forestry and environmental policies, and rural development policies, with particular attention to improving social and cultural amenities, services and infrastructure, in order to stimulate social and cultural revitalization, and primarily to engage young people in the revitalization process.

80. FAO could assist Member States to develop strategies for rural development and to determine the right combination of the above-mentioned policies and measures for revitalization. This could take the form of recommendations, but also through technical assistance programmes on a pilot basis in a regional or country context.

81. However, there are still many unanswered questions and more research is necessary. Therefore, one of the first steps could be to organize a "*Pan-European Conference on Revitalization of Abandoned Land and Depopulated Areas*" in close collaboration with other international and European organizations and actors in this area (e.g. the EC, The World Conservation Union (IUCN), World Trade Organization (WTO), World Wildlife Fund (WWF), United Nations Educational, Scientific and Cultural Organization (UNESCO), Council of Europe, etc.)[23]. This would include awareness raising at institutional and political levels in Member States. The conference would discuss concrete situations of countries and geographical areas concerned. It would also identify agricultural and rural development policies and programmes for abandoned and depopulated regions that are WTO compatible and efficient in terms of revitalization. Furthermore, a *research programme* on the efficiency of programmes and measures and the economic impact of land abandonment and depopulation and the cost-benefit of revitalization policies, could prepare the ground for discussion and stimulate international debate on this issue.

[23] Considering the budgetary constraints faced by FAO, the organization of such a Conference could only be possible on condition that extra-budgetary funds are made available.