

Multifunctional Agricultural Policies and Practices in Europe and Relevance for Monsoon Asia¹

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1. Introduction

The multifunctional character of agriculture has become an accepted tenant of international discussions of agricultural development. In addition to providing food and fiber, agriculture is fundamental to ecosystem services, economic livelihoods, social and demographic stability, and personal and cultural identity. With the increasing concern about climate change, agricultural pollution and soil erosion, and the resilience and diversity of crop genomes, the multifunctional features of agriculture have become central to the larger issue of sustainable social and economic systems. Creating a sustainable world will depend in large part on establishing sustainable agricultural systems which provide multiple services. The 2008 report of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) cites multifunctionality as its number one “key message”:

Agriculture is multifunctional. It provides food, feed, fiber, fuel and other goods. It also has a major influence on other essential ecosystem services such as water supply and carbon sequestration or release. Agriculture plays an important social role, providing employment and a way of life. Both agriculture and its products are a medium of cultural transmission and cultural practices worldwide. Agriculturally based communities provide a foundation for local economies and are an important means for countries to secure their territories.” [IAASTD 2008:2]

While there is broad agreement on basic principles, there is a very lively policy debate regarding how the various functions should be prioritized and how to design policies and programs to support those functions: “The conceptions of multifunctionality vary within countries, between countries, among scientific communities, depending on what is defined as multifunctional (the agriculture as a whole? some agricultural practices? rural areas? forests, etc.). It also depends on what functions should be looked at as elements of multifunctionality: public goods,

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identities goods, employment, food safety, multiples roles, etc. [and]... on the rural development model adopted in the country" (Caron and Le Cotty 2006). There are two basic ways of defining the multiple functions of agriculture:

1. Functions are defined as ecosystem functions, and follow an ecologist's perspective emphasizing the natural environment;
2. Functions are defined taking a broader, human-centered perspective including social, cultural, and institutional capital in addition to natural capital. The role of the natural ecosystem in this approach is ultimately equated to that of satisfying demands from society.

The European Union has addressed the issues of multifunctional agriculture and the diversity of views and approaches among the member countries, as a core feature of developing a Common Agricultural Policy. In practice, the EU does not require compliance to any single definition of multifunctionality but has adopted a very broad definition which individual countries can adapt to their own priorities. The EU's "Cork Declaration" of 1996 noted that rural areas were still the home of a quarter of the population of the European Union and accounted for more than 80% of its territory. It also emphasized that rural areas were "characterized by a unique cultural, economic and social fabric, an extraordinary patchwork of activities, and a great variety of landscapes (forests and farmland, unspoiled natural sites, villages and small towns, regional centres, small industries)." Sustainable rural development, and in particular multifunctional agriculture, was to be put at the top of the agenda of the European Union" (Cardwell 2008:1).

With the Agenda 2000 reform and the European Council of Luxemburg, the European Union made sustainability and multifunctionality key objectives of its Common Agricultural Policy (CAP). Agriculture and rural areas are viewed not only as producers of agricultural commodities but also as producers of environmental and social goods. The reorientation is expressed too in the so-called European Model of Agriculture which was described by the European Commission (2002) as:

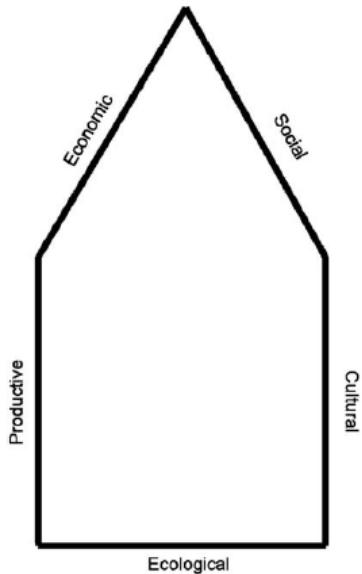
- a modern and competitive farming sector, capable of occupying a leading position in the world market, while safeguarding domestic producers' living standards and income;
- a sustainable, efficient farming sector that uses hygienic, environment-friendly production methods and gives consumers the quality products they desire; and
- a farming sector that serves rural communities, reflecting their rich tradition and diversity, and whose role is not only to produce food but also to guarantee the viability of the countryside as a place to live and work, and as an environment in itself.

Multifunctionality and "sustainable development" are strongly related concepts, in the sense that sustainable development provides the framework for describing and assessing all the economic, social and environmental aims associated with multifunctionality. Thus, multifunctionality within the agricultural sector is not a useful aim in itself, if it does not contribute to a better understanding and realization of different aspects of sustainable development in the context of agriculture and rural areas. When looked at from this larger perspective, the multifunctional concept can play a central role in opening up new, innovative approaches to the evolving relations between agriculture and wider society and the changing role of agricultural activities as part of sustainable rural development (Renting et al 2009:113).

2. Types of Functions

The multiple functions of agriculture can be depicted as a “House of Functions” (L. Fleskens, et al. 2009). “Ecological functions form the foundation of the living space, comparable to the concept of ecological footprint. Productive functions depart from the foundation and provide us

with products from nature: a standing wall. The second wall of the house represents the cultural functions, and is equipped with a window (the window on life). Culture links ecology to society and production links ecology to economy: the roof of the house is thus constituted by the lines representing economic and social functions, which in turn link at the ridge of the roof. If economy and society are balanced, the ridge appears just in the middle, that is to say, if they are balanced with ecology as well: if too much emphasis is put on ecology (a long base line) it leaves a gap in the roof, rendering the house uninhabitable. The opposite (too little attention paid to ecological functions) leaves a hole in the foundation.



2a. Food and fiber. The primary function of agriculture is, of course, to produce food. This function is so fundamental and essential that the other (multiple) functions can be easily overlooked. The attention now given to the functions beyond

food production (as discussed in this report) should not, however, detract from the primacy of producing food, and the indirect as well as direct benefits of that raw production. Food production, for example, provides not only life, but health, and the particular features of the crops produced and the distribution system which brings that production to food consumers, determine the extent to which the potential benefits of food production will be realized. Within the European context, food transport and marketing mechanisms are assumed, contrary to the situation in developing countries.

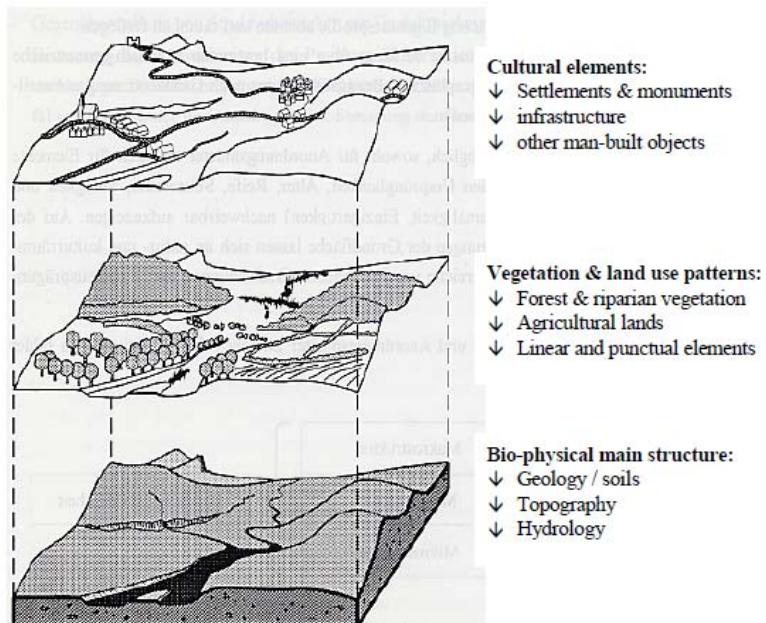
Agricultural productivity is conventionally measured in terms of gross physical output (kgs/hectare) or economic value (\$\$/hectare), or net profits. The concept of multiple functions (often in the form of public goods not reflected in farm-level economic calculations) also implies multiple external costs that are understated or ignored in conventional analysis. For example, nitrate pollution of groundwater, or the energy-intensive transportation system which is subsidized by the State, represent real costs which must eventually be paid by society. Research on production efficiencies is a central focus of conventional agriculture and provides the starting point for multifunctional approaches, which are basically asking “What else” besides crop production is being provided by agriculture.

2b. Ecosystem Functions. The physical interaction between agriculture and the environment is captured in the concept of “ecosystem services” and the acknowledged role of agriculture in wildlife habitat, soil and watershed management, carbon sequestration, and flood control. One of the most important functions that agriculture can support, but can also undermine, is biodiversity. Diversity of crops and crop varieties enhances agricultural diversity, and can also

provide diverse habitat which supports wild biodiversity of plants and animals.³ Carbon sequestering is becoming a highly valued aspect of agriculture and can be enhanced through the choice of crop as well as farming methods (Lal 2007). Similarly, soil and watershed management can be helped or hindered by the choice of agricultural practices.

2c. Landscape Functions. In the European literature, the term “landscape” refers broadly to both the physical effects of agriculture and the visible vegetation and land-use, as well as the man-made cultural features associated with agriculture (buildings, terraces, hedgerows), and the values attached to these features. Many European countries initiated “landscape character assessments” in the 1970s and ‘80s in order to: (a) Identify important environmental and cultural features, (b) Monitor changes in the environment, and

(c) Understand a location’s sensitivity to development and change. In this process, spatial units are identified as landscape typologies which form a basis for future planning. Each country takes its own approach, ranging from generalized to very detailed (e.g., Germany goes down to 1km² units). There was also an EU-wide effort, the European Landscape Character Assessment Initiative (ELCAI)⁴ to review the 17 country-level landscape character assessments and develop a common European landscape typology, map and core set of indicators. Landscape functions and values are interpreted as conscious societal demands towards producers (Wascher 2004). Agri-environmental measures targeting landscape enhancement have been in place since the 1990s to encourage public authorities to adopt policies and measures at local and regional levels for protecting, managing and planning landscapes.



2c. Social benefits. A major rationale for multifunctional agriculture in Europe is the support to rural development through diversified employment opportunities (e.g., agri-tourism, on-farm processing activities, nature and landscape management), as well as higher value production (e.g., through organic farming, high quality production, regional products or selling through a short supply chain). Between 30% of all farmers in the U.K. to 59% of all farmers in Germany are involved in some kind of diversification and 11% are active in nature or environment conservation (Renting 2009). The decision of a farmer to diversify depends not only on location or regional characteristics, but also on the characteristics of the farm and farmer himself. A key effect is closer linkages between rural producers and urban consumers. There is an important

³ The ecosystem dynamics with agriculture are the topic of the Agrobiodiversity Network, <http://www.agrobiodiversity-diversitas.org/>.

⁴ <http://www.landscape-europe.net>

educational and cultural component to these connections, which is the subject of growing interest and research.⁵ Rural-urban linkages can take the form of direct purchase of agricultural produce on the farm or in farmers' markets, or through agri-tourism, which itself includes a variety of activities. 'Agritourism makes local society more active and more entrepreneurial. It increases the income level of the rural population, enhances employment opportunities, and positively influences rural infrastructure. These changes are favourable not only for tourists, but also for local rural economies" (Sikorska-Wolak 2006).

2d. Health, Nutrition and Wellbeing of Consumers. Food quality, safety, nutrition and environmental health are growing concerns within the European Union, but there are important regional (and perhaps sub-regional) differences. A study in Slovenia found strong support among consumers for preserving biodiversity and traditional landscapes, but little concern about food quality (Juvancic 2006). A study in Finland showed the opposite priorities, with consumers ranking food quality and safety, along with animal welfare, as highly important, while showing little concern for the quality of the landscape (Yrjölä and Kola 2004). The negative health impacts from industrialized agriculture have led to an interest in "foodsheds" akin to watersheds, with an emphasis on consuming foods locally. The benefits include lower energy costs and higher nutritional value from fresher foods. The primary link between nutrition and local food, however, appears to be through increased awareness about food options.⁶

2e. Wellbeing of Producers (and rural communities). The role of individual producers in multifunctional agriculture is being studied in much detail in order to understand the motivations and incentives underlying behavior. In a study of French farmers, Cayre et al (2004) show that farmers are themselves multifunctional in their agricultural production, making choices about farming practices and crop choices which are social and cultural, as well as economic. These same farmers identified themselves very clearly as production-oriented, and not interested in shifting into agro-tourism even if it could be economically more attractive.

When incentive schemes to support particular farming practices (e.g., aimed at environmental or landscape benefits) fail to meet planning targets, the cause is not necessarily that farmers oppose the approach. There is a learning process where farmers may slowly and reluctantly adopt multifunctional agriculture in response to incentives or regulations, and then gradually internalize the new behaviors (Stobbelaar et al. 2009:175). Empowerment of farmers through publically acknowledging their value to society, may be one of the most significant benefits to producers, but is difficult to measure. "The case of Norway gives us a taste of the role public policies could play in the valorisation of farmers as (re)producers of healthy food, nature, landscape, biodiversity, and public health"⁷

Agro-tourism. Rural tourism as a way to spend holidays and leisure time, organized by farmers and other inhabitants of rural areas, has become more and more popular in Europe. In contrast to

⁵ See, for example, the EU-supported RURBAN project, <http://www.rural-urban.org>

⁶ A recent study by MIT researchers suggests that a "foodshed" approach could be an effective strategy to combat the growing incidence of obesity in the United States: <http://web.mit.edu/newsoffice/2009/foodshed.html>.

⁷ (quoted from the WUR Rural Sociology Blog on Multifunctionality:

<http://ruralsociologywageningen.wordpress.com/2009/10/27/can-farmers-inform-policy-about-multifunctional-agriculture/>

mass tourism, rural tourism gives city dwellers an opportunity to experience attractive, healthy and relatively cheap rest in a natural environment, far from crowds, noise, and pollution. It enables them to meet the rural population and to get to know their living style and living conditions, as well as working conditions and cultural riches of the village. Most of all, it is a chance for the village and for many farms to develop, still keeping their identity, integrity, and values steaming from rural culture and tradition and at the same time open themselves up to outside contacts. Agritourism makes local society more active and more entrepreneurial. It increases the income level of the rural population, enhances employment opportunities, and positively influences rural infrastructure. These changes are favourable not only for tourists, but also for local rural economies (Sikorska-Wolak 2006).

2f. Culture Heritage. There appears to be strong support across European society for protecting the cultural heritage of agriculture, including landscape (see above) and food culture (e.g., regional specialties). The value placed on culture heritage is tied to active and authentic farming operations rather than “Disneyland” farm museums (Daugstad et al 2006): “...The best way of upholding the cultural heritage connected to agriculture is with a system of active farming, or ‘protection through use’ ” The relationship between culture heritage, agrotourism, and rural sustainability is nicely outlined in the following recommendations for preserving agricultural traditions in Norway (cited in Daugstad, p. 74):

In order to secure a tourist business with competitive power, we must, in addition to nature, focus on culture, people, food, modernity, history and living local communities. This requires that Norway maintains the settlement structure in rural areas. Without settlement and employment in rural areas and a viable agricultural business with Norwegian food production, rural communities will eventually be depopulated and the cultural landscape will decay.

Culture heritage supports not only a landscape and economic (agri-tourism) function but also constitutes a regional identity and sense of place. Two aspects that are often related to culture heritage, and are often included in landscape assessments, are *recreation* and *tranquility*. Recreation refers to the accessibility of the agricultural landscape, e.g., through agro-tourism, or trails for biking or hiking. Tranquility includes quantitative measures such as noise and artificial lights (at night) as well as the subjective experience of landscape features which connote peaceful (“pastoral”) moods within the cultural experience (e.g., sheep grazing on a hillside).

2g. Food Security. The localization of agriculture and food self-sufficiency are promoted by environmental organizations and producer unions as an important element of European agricultural policy, but not specifically as a feature of multifunctional agriculture. The subject of food sovereignty (and also seed sovereignty) is included in campaigns for a sustainable, environmentally-friendly agricultural strategy. This is where the discussions of multifunctionalism merge with the larger issues of sustainable rural development.⁸ Food security is an issue at local levels (e.g., within watersheds or “foodsheds”) and is also a global issue related to sustainability. At the local issue, food security and food sovereignty are closely linked in terms of the biodiversity represented by local crop varieties, and the viability of diverse local food production which provides resilience against the danger of supply disruptions in trans-local food sources. A key issue which is not well addressed within the European context is whether

⁸ See the discussion of European Common Agricultural Policy at <http://cap2020.ieep.eu>.

small-scale local agricultural production, which provides multiple functions for society's overall benefit, is truly adequate to meet the food requirements of a growing population. According to Brody (2008), based on his work in the Midwestern United States, there is no inherent contradiction between multifunctionality and production, whereas in the view of Wilson (2007), citing the European experience, there is a trade-off between mono-functional agricultural productivity and multifunctional benefits. This debate, which is interesting but not critical in the European context, takes on central importance in considering the relevance of multifunctional approaches to developing country agriculture, where production concerns are paramount.

2h. Energy and Climate Benefits. Agriculture that supports a broad range of social and environmental functions can be expected to also be less energy intensive in both the production process and in transportation to (local) markets. Within the European context, however, the inherent energy-saving features of multifunctional agriculture is little discussed, except in reference to traditional and "appropriate" agricultural practices in developing countries. Even more surprising is the lack of attention given to agriculture's potential role in mitigating greenhouse gases, whether CO₂, nitrous oxide, or methane. A recent analysis suggests that increased use of manure, which is a normal part of traditional, small-scale farming practices, could have a substantial beneficial impact in carbon sequestration equivalent to ca. 25% of the total carbon emissions of the United States (GRAIN 2009). While the details are open to question, the general principle of locking carbon into soil humus is well established (see Lal 2007). Energy savings and carbon sequestration will undoubtedly take on greater prominence in the near future, in policy discussions about multifunctional agriculture.

3. Policies and Programs to Promote Multifunctional Agriculture

3a. National Policies. There are two principle ways for the state to stimulate the production of non-food agricultural goods or services, regulation or economic incentives. Regulations can zone land use or restrict production practices, while the state can stimulate the provision of countryside benefits by offering economic incentives for adoption of specified actions (Prestegard 2003). These approaches may be found in a range of policies beyond agriculture, as many national governments do not apply multifunctional agricultural policies explicitly, but within the context of other rural, economic, or even social programs. These often fragmented policies are typically driven by EU priorities for agri-environment schemes, rural development measures for farm diversification and rural viability, or support to local food supply chains and forest. In other countries such as France, Italy, Switzerland and more recently the Netherlands and Germany, the multifunctional label is officially embraced and supported with specific national policies (Renting et al 2009:117).

Policies labeled as "Multifunctional" range from 'weak' to "strong". Weak forms of multifunctionality justify existing production subsidies as addressing positive externalities. For example, a subsidy to farmers who limit the number of cows on a unit of land, might have the objective of protecting vegetation and reducing soil erosion. Strong forms of multifunctionality have the intention of reorienting the agricultural sector away from the conventional focus on production into more integrated, territory-based rural development approaches (Wilson, 2008).

The French “Agricultural Orientation Law” (Loi d’Orientation Agricole – LOA) and the Decree 228 of 2001 of the Italian Ministry of Agricultural Policies are good examples of multifunctional policies at the national level. Both explicitly stress the multifunctionality of agriculture and provide a legal framework for the enhancement of this new role of agriculture. Examples of relevant programs not explicitly within the agricultural sector are the Dutch and British national Land Management Initiatives and the British “Eat the view” Program, the Swedish integrative framework of “national environmental objectives” and the German pilot program, “Active Regions – Rural Areas Shaping the Future.”

Programs aimed at the conservation or restoration of rural landscapes by direct payment schemes for farmers or other land managers often fail to meet their aims in spite of high participation rates. The limited effectiveness can be largely attributed to the fact that policies for environmental management are generally means-oriented, for instance prescribing the date of first harvest of grasslands, the amount and method of manure application or the detailed methods of hedgerow management. Participants are rewarded for minimum compliance to a level that penalties are avoided or benefits are acquired (external motivation), whereas effective provision of ecosystem services generally requires large-scale, persistent adaptive and site-specific management to deal with climatic and biological complexity and variability. A change in farmers’ attitude and behavior is necessary to adjust their practices beyond the prescribed measures and policy time window (Stobbelaar et al. 2009:175).

Rural policies beyond agriculture. An important dimension of multifunctional agriculture in Europe is the growth of non-conventional economic activities aimed at niche markets or lie outside the conventional boundaries of the agricultural sector. Agro-tourism encompasses not only tourist lodgings on farms, but also, on-farm processing activities and sales, and nature and landscape management for the twin purpose of providing environmental as well as touristic services. Organic farming, along with other forms of high quality production and regional products sold through a short supply chain, functions to preserve cultural heritage while providing added economic value for producers. The numbers of farmers engaged in these non-conventional farming activities varies between 30% of all farmers in the U.K. to 59% of all farmers in Germany. Similar research done in Belgium (in the fringe of Brussels and the coastal area, respectively a densely and less populated area) shows that 19% of all farmers are involved in some kind of diversification and 11% are active in nature or environment conservation (Vandermeulen and Van Huylembroeck 2006).

Evaluating Multifunctional Agriculture Policies. The primary basis for assessing public policies and the regulatory framework is the improved and sustainable delivery of those functions of agriculture and rural space for which there is a particular societal demand, and, more generally, the quality and sustainability of rural life. To measure and assess different rural development policies, the TOP-MARD project (see below) developed a list of outcome indicators to describe the impacts of different policies on the sustainability of a region. This list covers 1) local income and regional economy; 2) regional agricultural sector, 3) social equity and cohesion; 4) local quality of life, 5) rural population stability and 6) local environment. Several studies have argued that the usefulness of classical evaluation tools like cost-benefit analysis for multifunctional agriculture policies is limited, and that combinations of quantitative, qualitative, and consultative methods are more promising (Knickel and Kroger, 2008).

Explaining Policy Differences. Expressions of multifunctionality, not only in terms of governmental policies and programs, but also with respect to demands by consumers and wider society or the market arrangements and political-institutional frameworks in which they operate, are always specific in time and place. For example in the Netherlands there is a strong focus on ecosystem services and leisure opportunities provided by agriculture. By contrast, in France much attention is given to social, cultural and economic functions of agriculture by sustaining rural population and employment levels, a consideration which is practically absent in Dutch policy debates. (Renting et al., 2009).

Multifunctional Agriculture Reforms in Slovenia⁹

The main thrust of this reform effort was the reinstrumentation of agricultural policies to achieve their stated goals more effectively and efficiently. This can generally be characterised as a shift from market price support to direct payments and a greater emphasis on structural, environmental and rural development measures. The four major pillars of the reform are:

- Pillar I: Market price policy
- Pillar II: The Slovenian Agricultural and Environmental Programme
- Pillar III: Restructuring of agriculture and the food industry
- Pillar IV: Rural development measures

The resulting agrienvironmental payments aimed at promoting environmentally friendly farming methods which emphasise the multifunctional role of agricultural production as reflected in the public function of maintaining landscapes and biodiversity, as well as preserving the population in the Slovenian countryside by taking into account ecological, social and spatial settlement patterns in rural areas...

Adopted in late 2003, the Single Programming Document 2004-2006 (SPD) sets forth how Slovenia will spend available funds from the EU's Structural Fund and Cohesion Fund, and from the national budget. In the field of agriculture the following measures were carried out:

- Improvements to the processing and marketing of agricultural products
- Investments in agricultural holdings
- Diversification of agricultural activities and other activities "close to agriculture"
- The marketing of quality agricultural and food products

3b. Institutions to Support Multifunctional Agriculture. Institutional arrangements have helped promote multifunctional policies while also helping to the successful development of regional innovation systems. Van Huylenbroeck et al. (2007) reviewed a range of possible institutional arrangements, including coalitions with NGOs or private users and new public sector institutions to foster the establishment of markets for agricultural functions having a public goods nature. Successful institutional arrangements can positively influence the supply of public or private goods, provide ways to cope with market failure, save on transaction costs, and support the building of relevant social and learning networks.

Environmental Cooperatives constitute a new form of institutional arrangement based on negotiation and cooperation. Participating farmers commit themselves to endorsing and implementing policy goals (e.g., setting aside 20% of farmland for natural habitat), but have the

⁹ Source; Bedrac and Cunder 2009

liberty to choose region-specific measures and practices deemed most appropriate to reach these targets. The mutual obligations between state agencies and the environmental cooperatives are defined by contract, and constitute a type of social capital building (Renting et al. 2009).

Motivations for joining a cooperative. For organic farmers, collective maintenance of the landscape and knowledge sharing between the farmers were important motivating factors in their decision to join an environmental cooperative, whereas conventional farmers expected the cooperatives to assist in raising income from landscape management, while providing a sense of solidarity among farmers (Stobbelaar et al. 2009:180). The environmental values of conventional farmers who joined the cooperative for financial gain, tended to shift as they gained experience and came to appreciate the environmental benefits their new farming practices were supporting.

3c. European Research and Planning on Multifunctional Agriculture. Over the past decade, there have been a number of major initiatives to focus research attention on issues related to multifunctional agriculture. Most of these efforts have been financed primarily by the European Union with national institutes also contributing. A complex web of research partners has been developed through these projects, which helps ensure the continuation of research interest on the topic of multifunctionality, and increasingly, related aspects of rural development. Following is an overview of major projects:

Multagri Project (www.multagri.net) This project, which was active from 2003 to 2006, remains the most comprehensive project addressing multifunctionality very broadly, under six research issues:

- Definitions of the concept of multifunctionality, and its contribution to sustainable development.
- Consumer and societal demands;
- Models, techniques, tools and indicators that are of value in examining multifunctionality;
- Multifunctionality of activities, plurality of identities, and new institutional arrangements;
- Establishment and management of public policies aimed at promoting multifunctionality; connecting agriculture with new markets and services and rural enterprises;
- Evaluation of the effects of policies on the multifunctionality of agriculture: observation tools and support for policy formulation and evaluation.

TOPMARD (www.topmard.org) was a successor to the Multagri Project and focused on specific study areas in 11 EU countries to explore the diversity of multiple functions, co-production, and impacts on rural development across Europe. A core project deliverable was to characterize the driving forces and interrelations in a policy model (called POMMARD)¹⁰

¹⁰ See: “Towards a New Analysis of CAP Policy Options: Using System Dynamics to Model the Relationships between Agricultural Functions, Territorial Rural Development, and Policies” by John M Bryden, paper presented to the ESEE Congress, Lubljana, Slovenia. June 2009. <http://www.esee2009.si/papers/BRYDEN%20-%20Towards%20a%20New%20Analysis.pdf>

which would allow the simulation of the dynamic economic, social and environmental impacts of different future policy scenarios in different rural contexts.

CERES Project (<http://www.cemagref.fr/English/PS04/tr04ceres.htm>) focuses on the environmental contribution that multifunctional agriculture can make to support rural quality of life, and particularly water quality.

AMANDE Project (<http://www.cemagref.fr/English/PS04/tr04amande.htm>) explores how agriculture can enhance rural amenities and particularly landscape values.

SEAMLESS Project (<http://www.seamlessassociation.org/>) develops environmental models for agricultural impact assessment and planning.

MEA-Scope (<http://www.meascope.org/>) analyzes the economic interactions of multifunctional agricultural policies at the local (micro) level.

Planning is an essential component of multifunctional agriculture policies, since these policies are trying to overcome the status quo. In addition to policy strategies at the EU and national levels, the practical focus of multifunctional agricultural planning aims at the local level via a “territorial” approach to rural development policy. All relevant actors must be involved in setting-up and implementing rural development strategies within a regional territory. Not all rural areas face the same problems and only a bottom-up approach can lead to successful rural development strategies.¹¹

4. Recommendations and Conclusions

The research challenges posed by multifunctional agriculture go beyond the reach of individual disciplinary approaches. Rather, a move forward towards integrated, multi- and interdisciplinary approaches appears to be required, in which MFA serves as a shared concept that facilitates communication across disciplinary boundaries by creating common vocabulary and analytical framework. “The distinctive nature and added value of the multifunctionality concept is best understood by situating it within the framework of sustainable development. Sustainability research has especially been strong in providing a framework for operationalizing desirable...outcomes of particular development trajectories....However, the underlying mechanisms and transition processes required for attaining sustainability goals have received less attention. It is exactly here that the MFA concept has strong potentials for further development. (Renting et al. 2009:119]

The multifunctional approach to agriculture has become the centerpiece of European policies to promote sustainable rural development. The approach is seen (by Renting, above, and by other advocates) to fill a missing link between grand pronouncements about sustainability and the

¹¹ Assembly of European Regions, AER Conference on Rural Development, Lillehammer, Oppland (Norway), 29 February 2008. FINAL RECOMMENDATIONS. <http://www.aer.eu/events/regional-development/2008/conference-rural-development.html>

practical steps needed to get there. If multifunctionality is so important to Europe, is it not also important to other regions? Is the relevance of MFA limited to wealthy, already industrialized countries? Is it limited to northern, temperate climates? The following sections address these twin issues: (1) To what extent is the European approach to multifunctionality relevant to the Monsoon region of Asia? (2) To what extent is the MFA concept relevant to developing countries?

4a. Relevance to Monsoon Asia. Multifunctionality is already accepted in the agricultural policies of Monsoon Asia, and particularly in Japan and Korea. Where the European experience offers some additional perspectives is in recognizing an expanded set of functions for agriculture, and in the detailed policy measures and programs which the Europeans have adopted to enhance agriculture's services. In Europe, the concept of multifunctionality serves as the starting point for detailed studies into the precise features of the services that agriculture provides in particular regions, subcultures, and social and natural settings. Diverse policy responses include incentives and regulations, and the research studies and conferences to discuss their implications. In many ways, the Europeans are doing much more to analyze and protect the multiple functions of their agricultural systems than is the case in Monsoon Asia, although it can be argued that the Asians actually have more to protect in terms of the richness of social, cultural, and environmental benefits derived from paddy agriculture. Multifunctionality in Europe refers to a fundamental change in the role that agriculture plays within society. The challenge in Europe is to push the logic of multifunctionality into the entire agricultural sector, and to apply the debate about the future of rural society to the production-oriented large-scale industrial forms of agriculture which continue to dominate. The same challenge pertains to Monsoon Asia, where multifunctionality has so far been relegated to a small set of recognized functions (e.g., flood control, wetland habitat, and the social capital inherent in community-based irrigation management), while large-scale agriculture is viewed as outside the purview of the multifunctional approach.

4b. Relevance to Developing Countries. The question of whether MFA is compatible with the demands of production-oriented agriculture (namely, feeding the world's growing population) lies at the heart of the issue of its relevance to developing countries. Is MFA an alternative approach to meeting food needs, or is it an evolutionary stage of agricultural development that becomes practical only as the economic role of agriculture becomes dwarfed by the industrialized sector, and national budgets can afford to subsidize such luxuries as wildlife habitat and cultural heritage? These questions have already been asked, and answered, in the context of agro-ecology and other forms of ecologically-oriented agriculture (Altieri 1987; Pretty 2002). Arguing from the perspective of ecological economics, these proponents of agro-ecology maintain that small-scale, environmentally friendly producers do indeed have the capacity to feed the world, while protecting the planet. The logic of multifunctionality, which identifies a range of important social and cultural "externalities" adds further weight to the agro-ecological approach. At the same time, the emerging facts of climate change provide further evidence of negative externalities that had not been adequately accounted for as costs associated with energy-intensive industrial forms of agriculture.

The application of MFA to the agricultural policies of developing countries is both logical and urgent, given that conventional agricultural initiatives continue to undermine the legitimacy of traditional farming systems. The local knowledge of agricultural technologies and landscapes

comprise a valuable resource that is being steadily eroded through policies formulated under the dominant paradigm of industrial agriculture. Ongoing “alternative” agricultural development programs such as the Agricultures Network (<http://www.leisa.info/>), and projects led by BothEnds (www.bothends.org), the Compas-Network (www.compasnet.org) and the ETC Prolinnova Program (www.prolinnova.net) are demonstrating the feasibility of meeting food needs through ecological approaches that have social and cultural benefits as well. Although not using the label of “multifunctional agriculture”, such projects are fully consistent with the logic and of MFA logic. The developing country context precludes the use of direct subsidies to support agriculture’s multiple functions (as the Europeans can afford to do), but the above-mentioned projects show that the economics of meeting multiple functions through agriculture do not depend on subsidies, but on structural integration with the broader political and ecological economic context. Even the for-profit company, Mars, Inc, has adopted multifunctional agricultural policies in their West African operations, because it is good for business over the long run:¹²

“Mars is proud of our long history as the global leader in cocoa research and the contribution we continue to make to advancing cocoa science,” said Howard-Yana Shapiro, Global Plant Scientist, Mars, Incorporated. “For the first time, we have built consensus among the key stakeholders that cocoa farming in Africa must move to a more sustainable model. For decades, Mars has been at the forefront of forging unique public-private partnerships that create new social, economic and environmental opportunities for the millions of farmers throughout the tropics who depend on cocoa for their livelihood. This is a quantum leap forward in working towards poverty elimination, renewing the fabric of the rural sector and stabilizing the lives of West African cocoa farmers.”

A similar sentiment is articulated by Via Campesina, an organization representing small farmers around the world, and who had long remained ambivalent about MFA as a luxury for the wealthy North. The logic of multifunctionality, however, transcends politics and has earned the support of Via Campesina: “We...emphasise the need to recognize and foster the multifunctional role of agriculture in the Global South. The EU, which champions multi-functionality to defend its system of subsidies to European agriculture, has failed to apply the same yardstick to African farming. This anomaly should go and the Global Donor Platform should clearly recognize this multi-functionality as the pivot on which African agriculture rests and not repeat the sterile argument about productivity. It is time to recognise that rural areas in Africa are the repositories of African culture. African farming and food production systems are integral to the cultural process. Therefore it is mandatory that the EU, alongside African governments, acknowledge, respect and protect the cultural nature of rural areas in their development plans.¹³

4c. Final Conclusions. Multifunctional agricultural policies are an acknowledgement that agriculture provides multiple services, or “functions.” Decisions about agriculture are therefore not only agricultural decisions, but larger society-wide decisions. The interconnectedness of agriculture with society has been at the heart of human culture since the beginnings of agriculture more than 10,000 years ago. It is only fitting that our policies recognize this

¹² <http://www.mars.com/global/news-and-media/press-releases/news-releases.aspx?SiteId=94&Id=1494>

¹³ Excerpt from the Civil Society Statement to the EU-Conference on Rural Development (June 2007, Berlin): http://www.viacampesina.org/main_en/index.php?option=com_content&task=view&id=328&Itemid=36

historical connection that is part of who we are as human beings living in social groups and at the same time living in the natural world. The multifunctionality of agriculture is fundamental to our very natures as people and deserves to be studied seriously and urgently. Agricultural policy has never been more interesting!

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