

THE MULTIFUNCTIONAL BENEFITS OF AGRICULTURAL PRODUCTION – CONTINUED JUSTIFICATION FOR SUPPORT OF FARMERS?

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Under the European Model of Agriculture, the issue of multifunctionality has led to the provision and justification of, high levels of subsidies for farmers. Jill Tully assesses the validity of Europe's emphasis on multifunctionality, contrasting EU and WTO agendas. She argues against the multifunctionality clause, based on the belief that it acts as a facade for protectionism and colonial exploitation.

Introduction

While the economic benefits of agriculture have always been recognised, it is only in the past two decades that a greater emphasis has been placed on the social benefits arising from agricultural production. The EU has become an advocator of the importance of these multifunctional benefits and has incorporated multifunctionality as a fundamental element of the European Model of Agriculture. It has even become a justification for the maintenance of high levels of subsidies and protection for the European Agricultural sector. In the early 1990s, multifunctionality became a widely debated issue in agricultural discussions, at both a European and international level. The World Trade Organisation (WTO) classifies multifunctionality in the 'Green Box', thereby stating that it does not distort trade. However, it is argued that the use of the multifunctionality clause by the EU in international trade negotiations is simply a euphemism for protectionism (Swinbank, 2001), and a step backwards in trade liberalisation.

In order to proceed with this analysis, it is necessary to first define the economic concept of multifunctionality and the contrasting views presented by the EU and the OECD. Various elements of multifunctionality and their relationship with agriculture will then be assessed. In order to determine if continued justification for public support to farmers is still valid, the contrasting views of the EU and the WTO agenda will also be examined. This will be aided by the OECD's analytical framework for multifunctionality. From this, I shall conclude by highlighting the argument

against the use of the multifunctionality clause in the European Model of Agriculture. This argument is based on the belief that multifunctionality is a camouflage for protectionism and is a modern “continuation of colonial exploitation through different means” (Wilkinson, 2000:24).

Multifunctionality

Multifunctionality was first recognised at an international level in the 1992 Rio declaration on sustainable development. The OECD defines multifunctionality as:

...an economic activity [that] may have multiple outputs and, by virtue of this, may contribute to several societal objectives at once. Multifunctionality is thus an activity-oriented concept that refers to specific properties of the production process and its multiple outputs (OECD, 2001:26).

An example of multifunctionality is the benefits that agriculture provides to rural society through the preservation of customs and culture. I shall return to these benefits in greater detail later. The key elements that justify multifunctionality include:

- The ability to jointly produce commodity and non-commodity output through agricultural production.
- A proportion of the non-commodity goods display characteristics of public and private goods.
- In some instances the market is unable to supply the non-commodity goods and thus intervention may be required.

Before proceeding to the assessment of the issues associated with multifunctionality, it is necessary to select either a positive or normative perspective for this assessment. The positive approach focuses on multifunctionality as a characteristic of economic activity. The OECD highlights this perspective as not solely related to agriculture, but rather as a property of numerous economic activities, which can be positive or negative, intentional or accidental, reinforcing or offsetting, complementary or conflicting (OECD, 2001). Thus, the OECD has adopted this ‘positive’ concept of multifunctionality.

The alternative option is the normative perspective. This approach views agriculture through its ability to satisfy particular functions in society

and highlights its multiple roles. From this perspective, multifunctionality is not simply an element in the production process of agriculture. It can assume a policy role of its own; for example, aiming to make goods more multifunctional. This is the case with the European Model of Agriculture, where multifunctionality has become an essential element in the European Agricultural policies (OECD, 1998).

Both perspectives view multifunctionality from different angles. In this analysis I shall adopt the positive approach as outlined by the OECD.

Jointness

Joint production refers to two or more commodities that are interlinked and produced simultaneously. If the production level of one increases or decreases, it affects the other(s) in a similar way. Jointness can occur for three distinct reasons as outlined by the OECD (2001):

- Technical interdependencies in the production process and its provision for 'economies of scope'. These can have negative outputs such as soil erosion, gas emission and water pollution. The positive effects include improved crop rotation or controlled pest management.
- Numerous outputs are produced from a single input. Generally, these are not produced in equal proportion and some can be also associated with technical interdependencies including beef and manure or mutton and wool.
- The allocable inputs that are fixed at firm level. An increase or decrease in the production of one output changes the amount of the factor available for the supply of the other. This can often occur in relation to output and worker requirements and could result in unemployment.

As can be seen from above, there exist both beneficial and damaging outcomes in association with jointness. When considering the term jointness it is necessary to ask oneself; to what extent are the production of commodity and non-commodity goods considered joint, and are they efficiently produced in a joint capacity or could they be produced more efficiently, separately?

Some non-commodity goods, such as environmental and essential amenity services, can be justified as jointly produced because they are directly tied to the land and therefore are dependent on the provision of

agricultural output and activity. The complexities of jointness arise with non-commodity provisions that are not directly tied to the land and have the potential to be provided separately. Also, in many cases these non-commodity goods can be maintained more efficiently and cheaply when provided separately. It is therefore necessary to question why these non-commodity goods that are not directly tied to the land or jointly produced are included in multifunctionality. Historical buildings, for example, can be maintained without the requirement of agricultural activity.

One of the fundamental arguments for multifunctionality is the provision of rural employment, which plays a significant role in local community. Many local areas are dependent on agricultural employment as a means of sustaining employment. However, the question does arise in relation to the relationship between agricultural output and rural employment. In developing countries a positive relationship exists between production and employment. An increase in agricultural output will result in a direct increase in the demand for primary labour. However, in developed countries this is not the case. As a result of technological advancements and the replacement of physical labour by machinery on farms, the relationship between agricultural produce and rural employment is negative. In developed countries, some towns have become desolated as a direct result of the need to emigrate from the town for employment. Therefore, to what extent should the multifunctional argument be used to ensure continuing support is provided to rural employment? It is evident that in the case of rural employment, the issue of jointness is not as clear-cut as initially assumed.

Food security is highlighted as one of the fundamental multifunctional benefits of agriculture. Food Security has been defined by the United Nations FAO (Food and Agricultural Organisation) as the “access for all people at all times to enough food for an active, healthy life” (OECD, 1998:3).

The provision of food supplies is of national concern. While trading internationally to ensure sufficient food security usually yields the greatest efficiencies, history has taught us that uncertainty in future international supplies, global changes and fluctuating demand and supply has forced nations to internalise their food security policies. In developed countries today the jointness of food security is not a serious issue. However, in developing countries the jointness of food security is important as it also relates to non-agricultural factors, which include distribution and transportation systems.

The above examples illustrate the complexities that exist in determining the degree of jointness between commodity and non-commodity outputs of agriculture. While many do fit the criteria for the ‘green box’ (as

outlined by the WTO), some are in breach of this, resulting in trade-distorting outcomes.

Public Goods and Market Failures

Market failures can occur in the provision of non-commodity goods due to positive externalities. Economists define an externality as “a harmful or beneficial side effect that occurs in the production, consumption or distribution of a particular good” (Bohman et al, 1999:11). In theory, this occurs because producers ignore the benefits supplied to society from the externality and as a result, they under-provide the good that generates it. In general, economic theory promotes the use of subsidies in these circumstances in order to correct the market failure and restore the optimal level of efficiency (OECD, 1998). In some instances, a reduction in the supply of positive externalities can be offset by a reduction in the negative externalities; they may both balance each other. An example of an agricultural externality is the amount of run-off produced from fertilizer that is used on crops, which may eventually reach the nearby river. This externality possesses both positive and negative outcomes.

While some non-commodity goods produce positive externalities that imply market failures, it does not always justify the need for government intervention. In determining the level of intervention required, it is essential to estimate to what extent output is classified as a public good - scaling from pure public goods (in which government intervention is essential for its provision) to club goods (which operate more efficiently without government intervention). Most non-commodity goods yielding from agriculture are pure goods. Pure goods can be classified as non-excludable and non-rival; governments usually supply these goods (OECD, 2001).

Agricultural examples include natural habitats and rural landscapes. As a result of the non-excludability and non-rivalry elements of pure goods, there is no existing market for these goods and thus government intervention is essential in order to provide for the provision of these goods.

Models of Agriculture

There is a general agreement among many of the WTO member states that there does exist an element of legitimacy to the importance of providing for the multifunctional elements of agriculture. However, the general consensus

on the measures used to determine the different degrees of non-commodity goods is strongly debated (Committee of Agriculture Organisations, 1999). Having examined both the supply and demand aspects of multifunctionality we can now determine how and when intervention is necessary. The OECD (2001) has formulated three essential questions, which if answered yes to all, justify intervention:

- Is the non-commodity output jointly produced with an agricultural commodity and if so, to what degree can its link with commodity production be changed, e.g. by changing farm practices or technology?
- Is there market failure?
- Have non-governmental options such as market creation or voluntary provisions been explored as the most efficient strategy?

Therefore, the most efficient and logical intervention will be determined by the degree of jointness and public good qualities of the non-commodity good (Cahill and Shobavashi, 2000). The European Union views agriculture as one of its defining features and therefore feels that it is justified for them to use measures to protect it. In 1998 the European Commission highlighted this when they stated that “for centuries Europe’s agriculture has performed many functions in the economy and the environment and has played many roles in society and in caring for the land...” (Swinbank, 2001:4). Also, the EU maintains that the multifunctional benefits from agriculture provide a sustainable way for the EU to integrate all the inter-related objectives (production, territorial and social) of farmers and society (Committee of Agriculture Organisations, 1999). However, this provides neither an efficient nor logical reason for extensive subsidies provided to farms.

Many people argue that the EU uses the term multifunctionality as a means to continue justifying its high levels of agricultural support. The WTO separates agricultural policies into either green, blue or amber boxes depending on the degree of trade distortion that they accrue. The ‘green box’ addresses some non-trade concern such as food security and environmental programs, and as a result of this the EU has made substantial use of this policy in its justification for agricultural subsidies. In many cases the agricultural price support programs, which have been implemented by the EU to protect domestic price and agricultural production, have resulted in the distortion of international trade and prices. These policies have resulted in an increase in the level of production within its borders and consequently have increased the exportation and ‘dumping’ of agricultural products onto the international market, reducing world prices and having detrimental

effects on developing countries' agricultural markets. It has been argued that potentially up to \$72 billion per annum is lost in real income by OECD countries as a result of these agricultural support programs (Winters, 1990).

The Uruguay Round of the WTO has emphasised the need to reduce support provided by nations to agricultural production and its additional non-commodity produce. Some members of the WTO have argued that most of the existing non-commodity goods that are a by-product of agriculture and could be produced separately and equally efficiently. However, while this is quite likely in a country that does not require large subsidies for its production of agricultural produce (e.g. Canada), it does not apply to countries that are highly dependent on subsidies to protect their farmers and their agricultural industries (e.g. EU). The cost of protecting and ensuring the continued existence of the non-commodity goods varies significantly from one country to another, depending on the cost levels and priorities that the agricultural sectors face.

Conclusion

Throughout this article I have highlighted the complexities that have arisen from the classification of commodity and non-commodity goods and their degree of jointness, as well as the classification of goods as pure public goods and club goods. Also I have noted the benefits of externalities and the degree to which government intervention is justified. Some economists argue that the multifunctional benefits of agricultural production justify continued public support to farmers. I find this justification highly questionable. The importance of food security, the preservation of historical landmarks, landscapes and rural communities is a fundamental issue for the EU and the preservation of these multifunctional benefits is essential to the general EU community. From this aspect, it is understandable why the EU wishes to maintain its existing subsidies and the important roles that these play. The aspect of the continued justification is subject to question in relation to the extent to which the EU is distorting world trade and also the extent to which it is suppressing developing countries' agricultural economies. How can the EU claim to continue trade liberalisation through WTO negotiations, if they are going to continue with acts of protectionism?

The point to highlight here is that developed nations (i.e. the EU) are in a sustainable position to protect society, territory and production and to trade efficiently on the international market without the requirement of subsidies that distort prices. However, developing countries are in a less competitive position being economically inferior. Therefore the question

arises as to the justification of the European Model of Agriculture and the use of multifunctional benefits as a cover for protectionism. In this case, the EU is abusing its position of power in order to protect its own benefits. The threatening element is that the EU's power reaches beyond the WTO's control. By simply rejecting the agreements drawn up and allowing for the WTO negotiation rounds to almost collapse (as was the case with the Uruguay Rounds in 1994, and is the case with the stalling of the Doha Rounds at present) the EU can ensure that it maintains its existing level of subsidies and protection for its members. In December 2000, the Comprehensive Negotiating Proposal noted that the EU is still vulnerable to the charges that it is using multifunctionality as a camouflage for protectionism. Finally, Alan Swinbank notes:

...Protectionist intent...is liable to alienate its trading partners, and discredit the EU's negotiating stance. To be able to claim the moral high-ground in the negotiations, the EU should...focus on refining its suggestions for reform of the green box, whilst keeping in the fore the notion that the green box was originally designed to accommodate policies that have no, or at least minimal, trade impact (Swinbank, 2001:16).

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