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### Multilateral Agricultural Negotiations and Multifunctionality: Some Research Issues\*

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The Uruguay Round, while lacking much progress in effective agricultural liberalisation, has at least resulted in a framework to build on in the future rounds of agricultural multilateral negotiations and in particular the current, so-called 'Doha Round'. When the latter was undertaken in November 2001, non-trade concerns (NTCs) were specifically recognised and integrated into the negotiation process, albeit to a limited extent.

#### Terms of the debate: multifunctionality proponents and opponents

Although there is still considerable confusion among World Trade Organisation (WTO) member states about what is really meant by the term 'NTCs' or its synonym 'multifunctionality', all countries agree that agriculture and agricultural producers provide food and non-food outputs. Some non-food outputs are not, or only very partially, valued by market transactions and hence can be under-produced (in the case of positive non-food outputs) or over-produced (in the case of negative non-food outputs) relative to what society desires. In a general way, multifunctionality proponents claim that production-linked payments are necessary to obtain the non-food benefits that are socially desired because of jointness relationships between agricultural production and non-food benefits. They also argue that countries should have more flexibility in the domestic policy design, relative to what is currently provided by the provisions of the Uruguay Round Agreement on Agriculture (URAA). On the other hand, multifunctionality opponents argue that the URAA Green Box provides sufficient flexibility to address non-food benefits with the least distortion on trade. Multifunctionality is not a sufficient basis for continuing to pursue production-linked policies, i.e. those that distort trade according to the URAA classification of support policies. In their view, non-food benefits are (or will be) better addressed through specific instruments directly linked to positive externalities or public goods (or both), in accordance with the policy-targeting principle.

#### Some definitions

An externality corresponds to a situation where the action of one economic agent influences either the well-being of another consumer or the production possibilities of another producer in an indirect way, i.e. in a way that is not

transmitted by market prices. An externality can be positive (for example, when the action of an agricultural producer increases the well-being of some consumers or decreases the production costs of other producers) or negative (for example, when the action of an agricultural producer decreases the well-being of some consumers or increases the production costs of other producers). As the economic agent does not reap all the benefits of positive spillovers and does not support all the costs associated with negative spillovers, positive externalities tend to be under-supplied relative to what society desires and negative externalities tend to be over-supplied. There is a market failure owing to the fact that market prices do not include all the benefits and costs of externalities. As a result, there is room and legitimacy for public intervention in order to enhance positive externalities and reduce negative externalities. Pure public goods are defined by two characteristics: they are non-rival (consumption of the good by one person does not reduce the consumption available to another person) and non-excludable (once the good has been provided to one consumer, it is not possible to prevent other people from consuming it). All public goods are externalities, but not all externalities are public goods. Furthermore, a public good can increase or decrease the well-being of agents. In the first case, it really is a public 'good'. In the second case, it is actually a public 'bad'.

#### Identification, measurement and valuation issues

In the context of WTO agricultural negotiations, the previous definitions immediately raise the question of identifying the externalities associated with agricultural production. Assuming that the externalities associated with agricultural production can be identified, two intimately related issues are their measurement and their valuation. Unfortunately, it is clear that there cannot be an unambiguous resolution to the three problems of identification, measurement and valuation. Multifunctionality opponents recognise that there are external effects and/or public goods, arising from food security or the viability of rural areas or both. Yet they reject the idea that these factors are external effects associated with agricultural production. In the case of food security, the externality-generating mechanism lies on the consumption side and agricultural production is only a substitute for other sources of supply (such as imports or

stocks). In the case of the viability of rural areas, the externality-generating mechanism is employment, and agricultural employment is only one source of jobs in rural areas. Multifunctionality opponents reject this analysis, arguing for example, that food security is a by-product of domestic agricultural production as the latter provides an insurance against possible supply disruptions – most notably in times of crisis. In practice, it is mainly on the subject of the environment that both proponents and opponents of multifunctionality agree that agriculture generates positive, as well as negative, externalities.

### What lessons can be drawn from economic theory?

Let us assume that externalities associated with agricultural production can be unambiguously identified, measured and valued. Under these (heroic) assumptions, what lessons can be drawn from economic theory? The optimal results are well known. When governments are welfare-maximising and there is perfect information and competition, trade liberalisation benefits all countries, provided corrective policies properly internalise positive and negative externalities. The second most-favourable results are more interesting. If externalities are not adequately addressed, trade liberalisation may not be beneficial to some countries. But even in that case, which clearly corresponds to reality, trade policies are unlikely to be the best instruments to deal with positive and negative externalities. These externalities should ideally be addressed through targeted instruments. Furthermore, policies used to address NTCs are likely to be country-specific, reflecting differences in preferences among countries. These normative conclusions rest on several assumptions (perfect certainty, perfect competition, no transaction costs, etc.). It is clear that additional criteria have to be taken into account for the complete evaluation of policy choices and policy impacts. Criteria include administrative efficiency, monitoring and enforcement, information and uncertainty, ethical and political considerations (notably political feasibility), distributional issues and other distortions (because markets are far from being perfect), as well as flexibility and dynamic adjustments.

### Research needs

Theoretical and applied research is still in the early stages on many of the points raised above. Normative work should be completed using positive approaches. In particular, quantitative analyses should be developed to assess the potential impact of agricultural trade agreements and agricultural policy reforms on NTCs and inversely, the potential impact of multifunctionality policies on agricultural production, income and countries' welfare. To date, the external effects taken into account are mainly negative environmental effects. These are incorporated by adding an environmental module to production, trade or market models (or both). Nevertheless, analysis remains very partial as it does not include the full set of environmental damages or amenities generated by agricultural activities (e.g. open space or scenic vistas). Furthermore, it does not include the effects on food security or the viability of rural areas.

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