

AGRICULTURAL POLICY INDICATORS: A TOOL FOR POLICY MONITORING IN DEVELOPING COUNTRIES

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This note on the FAO's Agricultural Policy Indicators (API) initiative provides background on the project, outlines the types of indicator that are to be developed, and explains how the project differs from other efforts to monitor developing countries' agricultural policies, in terms of both content and process. It provides an update on progress so far and explains how the project complements other activities at the FAO and elsewhere. Ghana is to provide a template for API development, demonstrating the value of the proposed indicators, and some preliminary insights from this work are suggested. Finally, the resource requirements for developing the API project into a sustainable policy monitoring exercise are discussed.

1. Background

The Agricultural Policy Indicators (API) project seeks to develop a suite of policy measures of value to policymakers in developing countries. The proposed APIs are to be compiled by FAO for a range of developing countries on a consistent and comparable basis, and to be computed on a regular basis for purposes of policy monitoring and evaluation, and dialogue among countries. In this general sense, they can be seen as FAO's developing country counterpart to the OECD's monitoring exercise.

The basic aim of APIs is to clarify what policies are, how they have evolved, and how effective they are at attaining multiple objectives, including those related to the pursuit of economic efficiency, the promotion of equality and the provision of public goods. Key questions to be addressed in the context of developing countries are whether policies are pro-agriculture or discriminate against the sector, whether they are pro-poor and whether they support food security objectives effectively.

Among the requirements of APIs are that they should be easy to understand, capable of straightforward interpretation, and draw on a data collection system that is directed by FAO on an on-going basis. The numbers are intended to serve both a direct and an indirect function: they should be directly useful for policy benchmarking – by measuring policies in multiple domains they can identify the most urgent areas for attention; while indirectly they should form an essential input into more formal kinds of policy analysis, including quantitative models of policy impacts.

The genesis of the API project was the 2002 OECD Global Forum on Agriculture, where representatives from FAO, OECD, the World Bank and IFPRI all underscored the need for improved information on the functioning of agricultural policies in developing countries. Accordingly, the four institutions agreed to share their expertise and collaborate on the development of improved policy information. FAO has identified the need for improved policy measurement in Africa as a priority, and therefore African countries provide a suitable starting point for API development.

In 2003, FAO commissioned a paper by Tim Josling and Alberto Valdés, who proposed a methodological approach for the development of APIs (Josling and Valdés, 2004). This proposal was followed by two consultations at FAO (in October 2003 and October 2004),

where further input was obtained from a range of experts. This paper outlines a methodology based on that original proposal and reports on the current status of the project.

2. What are APIs?

The starting point for the development of APIs is the measurement of distortions that confront the agricultural sector, irrespective of their origin: commodity-specific, macroeconomic, structural or regulatory. Those distortions can be a result of explicit policies – including sectoral and commodity-specific trade policies, macroeconomic policies, pricing policies on input markets, and structural and regulatory policies. In these cases, a distortion arises whenever policy creates an incentive bias either in favour of or against the sector. Distortions can also arise implicitly, as a result of market failures and underdevelopment. For example, weak infrastructure may impede the incentive facing exporting producers, while underdeveloped credit markets may limit the opportunities facing small farmers. While these distortions are not a direct result of policy, policies can have a role in reducing them. The distinction is essentially between “commission” and “omission”.

For all markets affecting agriculture, including commodity markets, factor markets (land, labour, credit, purchased inputs), and foreign exchange markets, it is proposed that there be four levels of API indicator:

- (1) measures of explicit policy distortions, stemming from the direct application of policies (such as prices and trade measures) and from the way in which the sector is treated relative to the rest of the economy (e.g. through the evenness of tariff and taxation policy) or exchange rate policies that distort the relative prices of tradables and non-tradables;
- (2) measures of implicit distortions stemming from market failure / underdevelopment;
- (3) explanatory data that may account for the size of implicit distortions;
- (4) measures of policy effort to reduce implicit distortions and bridge the development gap.

Two examples should illustrate this principle. On output markets, prices received by producers may be higher than those of imported products at the border because of trade protection via tariffs or non-tariff barriers. Similarly producers may receive lower prices than those prevailing on world markets because they are taxed. These policies constitute explicit distortions (level 1). At the same time, domestic producers may face unnecessarily high transport costs, which would tend to protect import-competing producers and tax potential exporters. This is an implicit distortion, to the extent that it can be redressed by appropriate policies (level 2). Related explanatory data include information on the state of rural roads and infrastructure (e.g. the proportion of roads paved) (level 3), while measures of policy effort include spending on rural roads and other infrastructure (level 4). In the case of credit markets, interest rates may be controlled (level 1), but credit to smaller farmers may be unavailable or unnecessarily expensive because of failures in the credit market (level 2). Information on the spread of interest rates charged may illuminate the degree of market failure (level 3), while targeted interventions in the credit market may provide an indicator of policy effort (level 4).

The rationale for measuring policy effort is that suitable government policies and investments (typically in public goods) can reduce market failures and improve the operation of the market system. In many cases, these measures of policy effort equate to government expenditures. However, spending money is often not enough, and can even be counter-productive. Taking

the two examples above, infrastructure projects can be poorly conceived and managed, and targeted credit programmes targeted at potentially viable smallholders may create a new distortion rather than correct the existing one. In other words, policies can fail as well as markets.

This issue – the performance of government programmes to correct market failures – is an analytical question. The FAO's Roles of Agriculture (RoA) project (FAO, 2004), the OECD's work on multifunctionality (OECD, 2003), and the World Bank's "Beyond the City" study (World Bank, 2005), have each addressed the question of which policies are most appropriate to redress market failures. In many developing countries there appears to be sub-optimal investment in public goods, and at the same time inefficient and inequitable expenditures on private subsidies that could be fruitfully redirected to the provision of public goods. In general terms, APIs should provide an important input into analysing how rural policies can be more effective, and can be seen as a complementary initiative.

3. How does the API project differ from other initiatives?

The API project differs from other efforts to measure agricultural policies in terms of both content and process (logistics).¹ On the first count, previous efforts to develop indicators that are comparable across countries have largely focused on capturing explicit policy distortions. Although, implicit distortions have been measured in specific studies, and countries often assemble a range of relevant data, there has not so far been a major effort to bring a wide set of indicators together on a consistent basis.

For developed countries, the most important regular measurement of agricultural policies is undertaken by the OECD. The policies of OECD member countries have been monitored since the late 1980s (with measurement back to 1986). Since the beginning of the 1990s, country studies have been undertaken for Poland, Hungary, the Czech Republic and the Slovak Republic (all of which have become OECD members); the three Baltic countries Estonia, Latvia and Lithuania; and for Bulgaria, Romania, Russia, Slovenia and Ukraine. In each case, the completion of a country study has formed the basis for regular policy monitoring. The same was true for Korea and Mexico, when these countries joined the OECD. More recently, country studies of Brazil, China and South Africa have been undertaken, and the policies of these countries will similarly be monitored on a comparable basis.

The centrepiece of policy measurement by the OECD is the Producer Support Estimate (PSE), which measures transfers to producers and classifies them according to the way in which they are implemented, a hierarchy that essentially corresponds to distortiveness. The OECD also measures total support to agriculture via the Total Support Estimate (TSE). This adds to the PSE expenditures on general services to agriculture that are not directed specifically at producers, including those on research and development, inspection services, rural infrastructure and marketing and promotion.

The PSE provides a useful basis for comparing policies between countries. However it is of more limited use as a tool for policymakers in developing countries than it is in developed OECD countries. This is because, for developing countries, the biggest distortions are often of the implicit kind and market underdevelopment is a major issue. In the case of the three

¹ A thorough review of previous policy monitoring efforts is provided in Josling and Valdés (2004).

developing countries for which the OECD has recently undertaken country studies, support is proportionally much lower than in most OECD countries. Between 2000 and 2003, the PSE expressed as a percentage of gross farm receipts averaged 4% in Brazil, 6% in China and 5% in South Africa. This compares with an OECD country average of 31% over the same period. In each country study, the major policy recommendations stressed the need for pro-active development policies as much as the benefits of removing distortions captured by the PSE.

For each of these three developing countries, the need to sustain agricultural growth was emphasised, with progress contingent on appropriate policies towards: the development of rural infrastructure, land and labour markets, improving the terms and availability of credit, general taxation and environmental sustainability. At the same time, it was stressed that growth is not enough and that policies are necessary to reduce social divisions; specifically by integrating small-scale farming into markets, facilitating diversification of the rural economy, enhancing labour mobility and increasing investments in human capital via expenditures on health, education, and extension services. The API project focuses on the development of indicators that can help policy-makers address these broader objectives.

For developing countries more generally, the benchmark set of indicators comes from the pioneering work assembled by Kruger, Schiff and Valdés (KSV, 1988 and 1991). This study computed direct and indirect assistance to agriculture in 18 developing countries, covering the period 1960 to 1985. Direct assistance was measured via price comparisons (nominal rates of assistance), while the estimate of indirect assistance accounted for differences in trade policies towards agricultural and industrial products, and the effects of exchange rate misalignment. The study found that the net effect of direct and indirect interventions was a large transfer out of agriculture.

Since then, there have been two other World Bank studies along similar lines, but with specific geographical coverage. The first examined agricultural price and trade policies in eight Latin American countries, following major reforms in these countries, and covered the period 1984-94 (Valdés, 1996); the second performed a similar exercise for six transition economies between 1994 and 1997 (Valdés, ed., 2000). A team led by Petit and Allaya at the University of Montpellier has also calculated similar indicators for Egypt, Morocco, Turkey and Tunisia for the period 1994-1999.

The most recent World Bank initiative, led by Anderson and Martin (2006), seeks to consolidate these efforts and bring the KSV analysis up-to-date for a wider set of about 40 countries (compared with 18 in the original KSV study).² The main hypothesis is that the major findings of the KSV need to be revised, given important reforms in many developing countries. For example, in both low income and middle income countries tariffs on both agricultural and non-agricultural goods have fallen significantly, although non-agricultural tariffs have fallen more slowly, leading to (on balance) a slight favouring of agriculture over other sectors. At the same time, the extreme exchange rate misalignments (overvaluations) that were a feature of the 1980s, and had a huge effect on farmers' incentives, have largely dissipated (Jensen et al., 2002; Elbadawi, 2006).

Among the specific contributions to the Anderson and Martin study, the FAO (Brooks and Croppenstedt) is providing the analysis for Ghana. At the same time, Ghana is proving a template for more general API analysis. The proposed framework involves measuring explicit

² Add country listing.

distortions in a way that is comparable with other studies and at the same time computing implicit distortions and other types of indicator as described earlier. A major expectation here is that Ghana will conform to a general developing country pattern of significant albeit reduced explicit distortions, with major implicit distortions that impede development (see Annex). For the API project specifically, the aim is to not to provide an exhaustive review of agricultural policies in Ghana with associated policy recommendations, but rather to demonstrate how the development of core indicators can assist policymakers and set out more clearly the available policy options.

The API initiative differs fundamentally from existing efforts at measuring policies in developing countries in terms of the envisaged process. All the studies mentioned above are essentially one-off analytical efforts (albeit with a considerable shelf life). In each case, the priority has been to concentrate available expertise to answer policy questions as quickly and accurately as possible. There is a clear trade off between this approach and one that seeks to cultivate links with national governments, build these analyses into national monitoring decision making procedures, develop institutional capacity at the national level, and actively promote dialogue between countries. This is a major objective of the API project.

It is important recognise that the World Bank initiative is itself a major undertaking. In order to make the task manageable, it draws on existing work to the extent possible (including OECD PSEs), and focuses on specific policy questions related mainly to trade and domestic agricultural policies, rather than the broader development agenda. The even greater scope of the API initiative calls for commensurate institutional buy-in and commitment.

A project proposal prepared in 2004 proposed four components: (1) the development of APIs for six countries; (2) a major training component for in-country data collectors and analysts; (3) review and validation workshops for the data and analysis; and (4) dissemination activities, such as web-based public access systems linking across participant countries. Over a 24 month period, the projected cost was approximately USD 1.1 million, comprising USD 100,000 per country for the first component and USD 500,000 for components 2 to 4. As with the OECD monitoring process, the marginal costs of maintaining coverage would be much lower. The ultimate long term goal remains to produce APIs for more than 100 developing countries.

To summarise, the API project expands the scope of the proposed policy measurement compared with PSEs and at the same time has an ambitious institutional element. For that reason the resource requirements are substantial. In order to demonstrate clearly the value of the proposed approach, the proposed methodology is being set down in greater detail, with information for Ghana providing a template for implementation. The final section of the paper concludes with an update on progress so far and some preliminary observations from the case study.

Annex. Ghana case study

A comprehensive study of agricultural distortions in Ghana was undertaken by Stryker (1990). This study, which was integrated into the 1991 KSV report, describes the evolution of agricultural policies and their consequences from the pre-independence period to the mid-1980s, when liberalisation and structural reforms were initiated. Key themes of the study are macroeconomic instability, currency overvaluation, strict controls of the economy in general and the agricultural sector in particular, ineffective state intervention, and mismanagement of the cocoa sector. Allied to this, the economy was characterised by political instability, policy reversals, and rent-seeking to such an extent that by the mid-1980s the economy had devoured itself and there were no more rents to extract.

The contribution by Brooks and Croppenstedt to the latest World Bank initiative aims to bring the Stryker story up to date, examining the character of reforms and their impacts over the last 20 years. It is clear that there have been enormous changes since the 1985 cut-off of Stryker's analysis. There has been a marked improvement in political and macroeconomic stability, and fundamental reforms have been introduced, including exchange rate liberalisation, and the removal of most inter-sectoral distortions. There has been progressive albeit partial liberalisation of the economy (tariffs are set at three levels: 0%, 10% and 20%) and important structural reforms, although it has become progressively harder to push through fiscal and financial sector reforms.

Early findings from a study of explicit distortions affecting the agricultural sector suggest the following: that Ghana's growth has continued to be impeded by distortions at both the economy-wide and sectoral level. Continuous themes have been excess demand in the economy, currency overvaluation, a net discrimination against exportable agriculture, mismanagement of the financial sector, and heavy state intervention. Over the past 20 years these policy biases have been reduced but not eliminated. The Brooks and Croppenstedt paper will quantify these policy distortions, and assess the benefits to be derived from their reduction.

The complementary measurement of implicit policy distortions, explanatory indicators, and measures of policy effort will provide a wider context and serve as a template for API development. The hypothesis is that Ghana's development, while still impeded by distortions to its own economy and distortions in other countries, including in key sectors such as cocoa, is also hamstrung by structural weaknesses in the agricultural sector, notably weak infrastructure, poorly functioning land and credit markets, and underdeveloped human capital. These structural weaknesses coexist with wider problems such as a weak manufacturing sector and a lack of outward orientation in potential export sectors. As a result, Ghana's economy, while performing better than in the past and better than many African countries, has not yet achieved rapid and broad-based economic growth with commensurate reductions in the incidence of poverty.

The current plan is to have a first draft report assessing explicit distortions to Ghana's economy ready in June 2006, and a draft study of implicit distortions and other APIs ready in July. In conjunction with a detailed conceptual exposition, it is hoped that these product will improve the prospect of APIs being developed widely and regularly for purposes of policy monitoring and discourse.

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