Asia and Pacific Commission on Agricultural Statistics

Twenty-fourth Session
Da Lat, Viet Nam, 8-12 October 2012

Agenda Item 4
Overview of the Agricultural Market Information System (AMIS) and projects relevant for selected countries in Asia and Pacific Region

FAO Statistics Division
2012

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1 This overview paper is mainly based on a recent draft paper prepared by E. Carfagna and N. Keita in collaboration with AMIS Secretariat for the Second Market Information Group Meeting 2-4 October 2012 and on the "Umbrella project" (FAO2012a) prepared by AMIS Secretariat, as well as FAO/Japan and FAO/BMGF project proposals. More detailed information can be found at: http://www.amis-outlook.org/home/en/
I. OVERVIEW OF AMIS

AMIS is a collaborative food information initiative to strengthen synergies and improve data reliability in global commodity markets, initially focusing on wheat, maize, rice and soybeans.

The need for improved agricultural market information was recognized in the G20 Ministerial Declaration in June 2011 in Paris on an “Action Plan on Food Price Volatility and Agriculture” (Paris, June 2011), which stated “the importance of timely, accurate and transparent information in helping to address food price volatility, and agree(d) on the need to improve the quality, reliability, accuracy, timeliness and comparability of data on agricultural markets”. It was agreed to establish an Agricultural Market Information System (AMIS) in order to enhance the quality, timeliness and reliability of food market outlook information.

An AMIS scoping report prepared by FAO, IFAD, OECD, UNCTAD, WFP, the World Bank, WTO, IFPRI and the UN HLTF in May 2011 provides a review of the existing global food market outlook information mechanisms, identifies problems and gaps, and determines the scope, structure and operations of AMIS. The following problems and gaps in global food market outlook analysis were identified:

- Official country data on crop production and consumption forecasts often is not available to international information providers. When available, forecasts are often not timely and can be inaccurate.
- For most of the main producing and consuming countries reliable official information on food stocks is not existent.
- There are no formal links between national market outlook agencies and international information providers.
- There is a lack of indicators that are meaningful and comprehensive.
- Although international information providers include in their price monitoring work the developments in the energy and agricultural futures markets, there is need to increase the scope of market outlook analysis.
- The linkages with the private sector are often weak, especially as far as information on private stocks is concerned.
- Many major food market players have little capacity to collect information on expected production, stocks, trade flows and utilisation.

The AMIS initiative aims to address these gaps and shortcomings of existing agricultural market information systems by establishing a global monitoring system for the 4 most important commodities in the world (wheat, maize, rice and soybeans) based on improved quality data and analysis. This will be achieved by harmonizing and making available historical and forecast as well as stocks and price data of the G20 countries, Spain and non-G20 countries². These countries are major contributors to the global production or consumption (i.e. supply and demand); as such they have a major influence on the global food market. AMIS initiative will strengthen data collection on the ground and contribute to assembling high-quality information by fostering linkages and collaboration between the various data producers. It will refine existing methodologies and indicators to improve forecasts and increase the reliability of market outlooks. Finally, it will ensure effective outreach of agricultural market information to decision makers, and facilitate policy dialogue and coordination to address identified challenges.

Specifically, AMIS will consist of four main pillars that are interlinked and mutually reinforcing:

1. Market Monitor: to track current and expected future trends in international food markets, including policy developments and other market drivers, and to detect conditions that warrant the attention of policy makers.

² G20: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Republic of Korea, Turkey, United Kingdom, United States of America, and the European Union. Non-G20: Bangladesh, Philippines, Thailand, Vietnam, Egypt, Iran, Nigeria, Pakistan. The initiative covers also Spain which is a non G20 country but is part of the EU.
2. **Analysis**: to focus in-depth on topical issues affecting international food markets, such as futures exchanges, energy markets and price transmission, and to develop appropriate methodologies and indicators to support effective analyses.

3. **Knowledge Transfer**: to provide the foundation for improved statistical information from AMIS participating countries by defining best practices and methodologies to be applied as well as by strengthening capacities through training sessions and technical workshops with national statistical agencies and other stakeholders.

4. **Outreach and Policy Dialogue**: to disseminate key market information and analysis to guide policy makers and to provide a forum to facilitate policy coordination.

The AMIS initiative encourages major players in the agri-food markets to: share data; enhance existing information systems; promote a better understanding of food price developments; and further policy dialogue and cooperation.

To carry out its functions, nine international and inter-governmental organisations form the Secretariat of AMIS, each with a capacity to collect, analyse and disseminate information on the global food situation and market outlook. Apart from G20 members plus Spain, AMIS comprises seven additional major cereal producing, consuming and exporting countries that have been invited to participate based on their important role in world food markets. AMIS has an established governance structure that was agreed by G20 countries in September 2011. It consists of three main bodies:

1. **The Global Food Market Information Group** (“Information Group”), composed of technical representatives from countries participating in AMIS, provides data regarding the supply and demand position of AMIS crops and expected short term developments, as well as regarding prices. Furthermore, the Information Group organises the timely collection of national policy developments that could impact the market situation and outlook.

2. **The Rapid Response Forum** (“Forum”), composed of Senior Officials from countries participating in AMIS, promotes early discussion about international market conditions, and encourages coordination of policies and the development of common strategies, especially when the market situation and outlook indicates a high food security risk.

3. **The Secretariat**, composed of nine International Organisations and supported by a Steering Committee, is responsible for producing market outlooks, assessments and analyses, as well as for supporting all functions of the Forum and the Information Group, and for performing other administrative functions as needed.

The Terms of Reference of AMIS can be found at: [http://www.amis-outlook.org/fileadmin/user_upload/amis/docs/Inception_meeting/AMIS_TERMS_OF_REFERENCE.pdf](http://www.amis-outlook.org/fileadmin/user_upload/amis/docs/Inception_meeting/AMIS_TERMS_OF_REFERENCE.pdf)

II. **IMPORTANCE OF STATISTICAL CAPACITY BUILDING AT COUNTRY LEVEL**

The information reported by participating countries will form the basis of the global database that will be used for analysis of the market situation and related trends at global level. Therefore, the quality of global analysis depend to a large extent on the quality of data and information provided G20 countries and other major players on the global food market (suppliers and consumers).

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3 The Secretariat comprises FAO, IFAD, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF

4 These countries are Egypt, Kazakhstan, Nigeria, the Philippines, Thailand, Ukraine and Viet Nam.
However, some of these major countries have limited capacity to meet the key data and information requirements of AMIS because of weaknesses in their national statistical system, including food and agricultural statistics system.

For example, the World Bank Bulletin Board on Statistical Capacity (BBSC) includes a country-level statistical capacity indicator for IDA countries which provides an overview of their statistical capacity. Three assessment areas are: methodology; data sources; and periodicity and timeliness. Countries are scored against specific criteria and a composite score for each assessment area and an overall score combining all three areas are derived for each country on a scale of 0-100. A score of 100 indicates that the country meets all the criteria.

A review of the statistical capacity of relevant AMIS countries, based on that indicator indicates that the statistical capacity of six of the AMIS major food market players: China, Iran, Nigeria, Bangladesh, South Africa, Pakistan, Viet Nam can be considered low to medium with scores from 63% to around 75%.

As indicated above, this indicator concerns the overall statistical capacity with particular reference to macroeconomic data, basic censuses and surveys, income and socio-economic variables. It is very likely that the capacity of agricultural statistics sub-systems is weaker than the overall system in these countries. It is also likely that many others, face constraints for their agricultural statistics systems to provide key information. A more systematic assessment of the agricultural statistics capacity of countries is being undertaken in the framework of the Global Strategy using a Standard Country Assessment Questionnaire and is expected to provide more precise results. Preliminary results for countries in Asia and Pacific Region will be discussed during this APCAS Session.

Some of the countries mentioned above with limited statistical capacity are key players in the global food market in terms of production, trade or consumption. For example, China, Bangladesh, India and Vietnam produced together an on average in 2008-10 more than 400 million tons representing more than 60% of world production. Nigeria produces 21.7 of coarse grains and is a major consumer in Africa. India is the third wheat producer with an average production of 80.0 million tons in 2008-10 which represents 11.9% of world production.

Strengthening capacity to produce reliable and timely information in these key countries is essential for significantly improving global food market information system and realisation of AMIS goals. This is why Capacity Development has been identified as one of the key priorities of AMIS initiative in synergy with other on-going initiatives, particularly the Global Strategy to Improve Agricultural and Rural Statistics.

The AMIS Secretariat has developed an Umbrella Framework to support capacity building in which Resource Partners contributions to specific projects will be articulated. The Framework highlights some of the principles and elements of AMIS capacity building strategy, in line with international consensus on new approaches to capacity building, that addresses three dimensions: (1) enhancing individual technical capacity; (2) strengthening institutions and organizations; and (3) creating an enabling environment instead of focusing only on a single aspect (FAO 2010a).

Therefore, AMIS capacity building activities will build on and complement existing country level data systems with a view to improving the generation, analysis and dissemination of agricultural market information and outlook. This will ensure tailoring the contribution of AMIS to fill prevailing information gaps and needs. It will also facilitate the realisation of synergies that will contribute to lasting impact of the initiative.

At global level, important linkages will be established with the Global Strategy to Improve Agricultural and Rural Statistics. While differing in their scope and coverage, many of the objectives of the Global Strategy are important elements within the framework of AMIS. Conversely, some outputs of AMIS will contribute to the objectives of the Global Strategy, such as improving the exchange of information and dialogue among main stakeholders of agricultural markets. Linkages are equally assured with the
Committee on World Food Security (CFS) by inviting the Chair of CFS as a Permanent Observer to AMIS.

The Umbrella Framework identified five main outputs:

- **Output 1**: Available information, including both statistical data and policy drivers, concerning production, utilisation, stocks and trade of AMIS crops is collected, evaluated and disseminated.
- **Output 2**: Relevant methodologies and indicators are developed to monitor and analyse market conditions and provide improved forecasts and market outlooks.
- **Output 3**: Capacity of national data producers is strengthened to collect and validate data on production, utilisation, stocks and trade of AMIS crops.
- **Output 4**: Policy makers in AMIS participating countries and other stakeholders are effectively informed of market situation and outlook, including on relevant policy developments.
- **Output 5**: Dialogue is strengthened among policy makers in AMIS participating countries and other stakeholders in international food markets.

In line with this Umbrella Framework, particularly in support of its output 3, the following projects funded by Japan and by Bill and Melinda Gates Foundation (BMGF) have been developed and will be discussed with relevant countries in Asia for implementation.

### III AMIS PROJECTS IN ASIA

FAO will soon enter into dialogue with target countries in order to discuss their involvement and define the best modalities for implementation of the activities in specific country context.

The activities for developing and testing improved methodologies for estimating AMIS commodities will be based mainly on the analysis of the good practices. Guidelines documenting relevant methodologies and field experiences will be developed taking also into consideration the constraints of the countries as identified by the country assessment, as well as the training of the staff in National Statistical Offices and Ministries of Agriculture to allow them accessing and applying enhanced technologies and improved methodologies.

#### 3.1 Japan Project: GCP/GLO/359/JPN

The aim of the project is strengthening agricultural market information. Target countries: Thailand and the Philippines. The Budget is $1,500,000 and the Duration: 36 months from October 2012 (to be finalised).

The Project will increase the quality, timeliness, accuracy and comparability of agricultural data to strengthen the capacity of Thailand and the Philippines to monitor relevant market trends and improve the evidence base for policy decisions. The Project focuses on one of the crops covered by AMIS, namely rice, for which it will enhance each country’s capacity to collect high quality data in the area of production, yield and stock estimation. This will be achieved by:

- Developing and testing improved methodologies for estimating rice production, yields and stocks
- Collecting best practices and preparing guidelines documenting relevant methodologies and field experiences
- Training staff in National Statistical Offices and Ministries of Agriculture in accessing and applying enhanced technologies and improved methodologies for the estimation of rice production, yields and stocks.

Given the important role of rice for the food security of other Asian countries, the results of this project will be disseminated to other countries of the Association of South-East Asian Nations (ASEAN). In particular, collaboration is foreseen with the ASEAN Food Security and Information System (AFSIS) to transfer knowledge and promote a harmonized data collection system.
The project will contribute to the goals of AMIS in improving market information by addressing capacity gaps in the food and agricultural statistics systems of Thailand and the Philippines. It will increase the quality, timeliness, accuracy and comparability of agricultural data and improve the evidence base for policy decisions and food security. Through links with the AFSIS framework, this project will benefit also market information systems in other ASEAN countries.

3.2 Bill and Melinda Gates Foundation (BMGF) Project: MTF /GLO/359/BMG

The aim of the project is Strengthening Agriculture Market Information Systems globally and in selected countries (Target countries: Nigeria, India and Bangladesh) using innovative methods and digital technology. The Budget is $ 5,609,264, the duration 36 months from August 2012

The project addresses the following problems and gaps:

- Non availability of official country data on crop production forecasts to international information providers;
- Inexistence of reliable official information on food stocks;
- Lack of reliable and timely and easily accessible data on food prices.

The project has three components:

(i) Development of methodologies as global public goods on crop forecasting, stock estimation and food price using digital technology;
(ii) Development of global and country IT platforms for timely data centralization and dissemination;
(iii) Building capacity of the three focus countries (India, Bangladesh and Nigeria) to ensure they have the capacity to implement the methodologies for improved Agriculture Market Information Systems.

The most important result of the project will be the improvement of existing methodologies on crop forecasts, stock estimates and market price data collection and monitoring through the use of digital and geo-referenced technology. The use of digital technology and other geo-referenced data will support cost effective and sustainable methodologies and tools for estimation of crop forecasts, stocks and market prices for wheat, maize, rice and soybeans with significant improvement in the quality dimensions of accuracy, frequency and timeliness.

Funds will be used to develop and test methodologies for effective Agriculture Market Information Systems based on digital and geo-referenced technologies in the three selected countries and develop their capacity to apply the methodologies and IT platform. The availability of global and country platforms will facilitate access to and use of market information systems for timely decision making by the global community and countries.

Guidelines will be prepared for crop forecasting, estimation of stocks and market price data collection and will be used to enable country statisticians to access and apply rigorous statistical methods based on digital and geo-referenced technologies on crop forecasting, stock estimation and market/food price monitoring.

The ability of Bangladesh, India and Nigeria will be improved to apply the best methods and digital technology for data collection and analysis. The technical capacity development at country level will build on the IT platforms, statistical methods based on digital technology and geo-referenced technology. The final result will be the increase of ability of country to produce data for food security and market analysis, to make data available and accessible to users, and create an enabling environment for better functioning markets.
The methodological developments and country capacity development under this project will be clearly articulated in the broader methodological research, training and technical assistance components of the Global Strategy and the methods and tools developed will be expanded to other countries.
Box 1: AMIS and the Global Strategy to Improve Agricultural and Rural Statistics

What is the Global Strategy?

The Global Strategy to Improve Agricultural and Rural Statistics (World Bank et al, 2011) is a ground-breaking effort to strengthen agricultural statistics. Initiated by the United Nations Statistical Commission, and supported by an extensive consultation process, it provides “a framework for national and international statistical systems that will enable them to produce, and to apply, the basic data and information needed in the 21st century.”

What does the Strategy try to achieve?

The objectives of the Global Strategy are threefold: (i) establishing “a minimum set of core data that countries will collect to meet current and emerging demands”; (ii) integrating “agriculture into national statistical systems in order to satisfy the demands of policy makers and other users”; and (iii) providing “the sustainability of the agricultural statistics system through governance and statistical capacity building.”

Which linkages exist with AMIS?

AMIS and the Global Strategy have several features in common, most notably concerning data collection, methodological development and capacity building activities. Specifically, following complementarities can be identified:

- Information from AMIS will feed into the Strategy’s minimum set of core data and products, and vice versa;
- Methodological development on indicators, guidelines and harmonised frameworks will benefit both initiatives
- Capacity building activities of AMIS will be integrated in the Global Strategy

In how far do both initiatives differ?

Despite sharing several characteristics in common, both initiatives also differ in certain dimensions. Main differences include their country coverage and scope, which is broader in the case of the Global Strategy. Specifically, while the Global Strategy targets all developing countries, AMIS will be implemented in G20 countries plus Spain and seven major producing, consuming or exporting countries. Similarly, the Global Strategy covers all key variables and all key commodities (including agriculture, fishery and forestry) while AMIS will focus – at least initially – on four variables (i.e. production forecasts; stocks, trade, and prices) and four crops (i.e. wheat, maize, rice and soybeans).

Conversely, by seeking to improve statistics, analysis and policy coordination, the objective of AMIS is broader than in the case of the Global Strategy, which focuses mainly on the generation and dissemination of statistics. As a result, the outputs of AMIS have a stronger focus on information exchange and coordination among policy makers, while the Global Strategy is concerned mostly with the introduction of new cost-effective statistical methods and tools; capacity development; and the dissemination of a minimum set of core data.

FAO (2012a): Page 14
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FAO: 2012c: *FAO/Japan project Strengthening agricultural market information in Thailand and the Philippines*
