

III. Current Situation in Asia-Pacific Countries

The Asia-Pacific region is home to over 4.2 billion people, representing 61% of the total world population². Despite the overall high economic growth that this region experienced in the last decade, progress in many countries is uneven. Rising inequality between rural and urban areas is also³ becoming more prominent. In the only two countries in the world with population that exceeds 1 billion and which belong to this region -- China and India- the incidence of poverty in rural areas is significantly higher than in urban areas, with 22.3% compared to 0.9% in China (2008, World bank) and 34.3% and 28.9% for India (2009, World bank), respectively.

While poverty rates in the region are declining, a large number of people still live in poverty as shown by Chen and Ravallion (World Bank 2012) and summarized in the following table. Note that a significant number of people live at or below the \$1.25 and \$2.00 dollars per day benchmarks to monitor poverty.

Table 1. Poverty measures at \$1.25 and \$2.00 per day by region for 2008⁴.

Percentage of Population below poverty lines in 2005 PPP		
Region	\$1.25 per day	\$2.00 per day
East Asia and Pacific	14.3 %	33.2 %
South Asia	36.0 %	70.9 %

Source: Chen and Ravallion, World Bank 2012

The aquaculture and fisheries subsector is an important source of livelihood and protein for people in the world where fish provides about 4.3 billion people with at least 15 % of their intake of animal protein. In 2009 there were 126 million tons of fish available for human consumption and Asia accounted for two-thirds of total consumption. There will be increases in capture fisheries and over the next decade aquaculture production is expected to rise by 33%. Asia produced 89 % of the world aquaculture production in 2010. Inland water capture production is a hidden food security asset particularly in the interiors of Asia, and is often overlooked or ignored. Its growth is continuous, although there are great challenges in estimating production. Developing countries will continue to account for about 67% of world fish exports⁵.

Despite the accelerated urbanization that started two decades ago, 57% of this region's population continues to live in the rural areas⁶, in which agriculture is the major source of

² Statistics sourced from the ESCAP Statistical Yearbook 2011 <http://www.unescap.org/stat/data/syb2011/index.asp>

³ Asian Development Outlook 2012

⁴ World Bank classification of regions: http://www.worldbank.org/depweb/beyond/beyondco/beg_ce.pdf

⁵ Chapter 8 Fish. OECD/Food and Agriculture Organization of the United Nations (2012), *OECD-FAO Agricultural Outlook 2012*, OECD Publishing

⁶ 2011 Statistical Yearbook for Asia-Pacific

<http://www.unescap.org/stat/data/syb2011/I-People/Urbanization.asp>

livelihood and subsistence. A quick study of the relationship of agriculture and poverty, using the 1995 and 2010 poverty incidence and growth of the agriculture sector for many countries in the region, shows that poverty rates of countries that have higher agriculture sector growth declined faster. This suggests that implementing policies that can foster higher growth in the agriculture sector may lead to poverty reduction. The 2008 World Development Report “Agriculture for Development” (World Bank 2008) relates evidence that growth in GDP that originates in agriculture is at least twice as effective in reducing poverty as growth originating in other sectors.

The region is a major producer and consumer of rice, wheat, and maize. Timely and reliable production statistics are needed because these commodities are traded in world markets with price volatility increasing as the levels of uncertainty about supplies also increases. The region shares issues facing the rest of the world about the affect of agriculture on the environment as policy makers seek answers to feeding a growing population.

A recent Asian Development Bank report states that climate change is a major contributing factor in the battle to provide food security in Asia and the Pacific. It states that growing pressure on ecosystems to produce food, as well as changing temperature and precipitation patterns, will have unpredictable and deleterious effects on existing food-producing resources.⁷

a. Countries Diverse in Size and Statistical Capacity

The current state of the availability of agricultural and rural statistics at the national level is best described as a wide spectrum that also corresponds to the wide range of economic development across the region with a group of highly industrialized countries, middle income countries, some that are in various points of transitioning from a centrally planned to a market economy, small island economies, very weak and fragile states, and less developed economies.

Highly industrialized or high income countries and territories of the region include Australia; Brunei Darussalam; Hong Kong, China; Macao, China; Taiwan Province of China; French Polynesia; Guam; Japan; Republic of Korea; New Caledonia; New Zealand; Northern Mariana Islands; and Singapore. Singapore and Hong Kong, China have a very small agricultural sector and hence, have fewer requirements for agricultural and rural statistics. On the other hand, economies like Japan, Australia, and New Zealand, with a substantial agricultural sector, have very good agricultural data support systems. In fact, Japan has been a significant provider of statistical assistance to many countries in the region while Australia and New Zealand concentrate their assistance on Pacific island countries. Australia, Japan, and New Zealand, however, also face the challenge of providing data for the emerging requirements to monitor the environment and land and water use.

Lao PDR, and Viet Nam are good examples of those countries in which the old and well entrenched administrative reporting systems (ARS) continue to exist alongside developing

⁷ Asian Development Bank, (2012), “Food Security and Poverty in Asia and the Pacific—Key Challenges and Policy Issues. ISBN 978-92-666-5

sample survey systems. Viet Nam's Ministry of Agriculture and Rural Development maintains a database of 230 indicators based largely on the ARS. In 2010 the Prime Minister approved a national indicator system composed of 350 indicators, to be compiled and maintained by the General Statistics Office (GSO). These indicators come from the other ministries and from GSO's sample surveys and censuses. Indicators mainly from the ARS are used by the Ministry of Agriculture for program monitoring and forecasting; the GSO indicators, particularly those from surveys and censuses, often have more than a year time lag, and are unavailable when needed by the Ministry of Agriculture. The GSO-maintained indicators, by law, are the official indicators and are the ones used to service international requests.

The first agricultural census of Lao PDR was led by the Department of Statistics with active collaboration with the Ministry of Agriculture and Forestry, and the second one was led by the Ministry of Agriculture and Forestry with the collaboration of the Lao Statistics Bureau (previously called the Department of Statistics). All other agricultural statistics are from the Ministry of Agriculture and Forestry, most of which are derived from the ARS. The capability of the Lao Statistics Bureau to conduct sample surveys is still at an early developmental stage. These provide two typical examples where the output of the statistical system needs to be coordinated because of the different sources for the data.

Lower and upper middle income countries of the region such as – China, India, Malaysia, Indonesia, Thailand, and the Philippines – have vibrant and largely self-financed statistical systems. Some, also still rely on a form of the Administrative Reporting System. China and India, for example, both still rely on the ARS but also have national level surveys. Full ownership and commitment to their statistical systems has been amply demonstrated in these countries; and they are capable of sourcing technical assistance needs through technical cooperation among developing countries. The Regional Action Plan provides the framework for improving the statistical systems in these countries which are in varying stages of development.

The small island countries and territories in the region require approaches to addressing their statistical development needs that are sufficiently different from those suitable for the rest of the region. Their size and isolation make the provision of assistance to them and statistical data collection activities by them very costly. This calls for judicious selection of the type of assistance and weighing of costs vis-à-vis periodicity of the statistics production, particularly since change in these countries and territories is relatively slower. The Ten-Year Pacific Statistics Strategy 2011-2020 plans the inclusion of agriculture modules in ongoing surveys and census of agriculture⁸.

The Secretariat for the Pacific Community (SPC) coordinates the implementation of the Ten-Year Pacific Statistics Strategy for the development of the capacity of the sub-region to produce statistics. SGAS further recognized the important role that the Secretariat plays in the implementation of the Ten-Year Pacific Statistics Strategy and as such recommended that any

⁸ http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=75&Itemid=42&lang=en

implementation in the Pacific sub region (including any assessments) be fully coordinated with the SPC.

Some least developed and low income countries in the region, such as Bhutan, Myanmar and Nepal are still heavily dependent on external financing for much of the needed censuses and surveys. The priority here is to get the governments to demonstrate ownership/commitment to their statistical service by taking over the financing of their censuses and surveys. This is a necessary condition for a strategy for statistical development to be sustainable. In Nepal and Bhutan, for example; the weak capacity of the main national statistics agency to produce timely and comprehensive agricultural statistics from sample surveys left the agriculture ministry to maintain the national agricultural database, largely using data from an administrative reporting system (ARS). The implementation plan for these countries needs to recognize that this will take a long term investment in capacity building that begins with building the infrastructure including staff and methodology that can grow and improve as experience is gained.

There are also fragile states in the region countries in the region that had gone through or are still suffering from prolonged internal strife, like Afghanistan. The priority in these countries is to rebuild the capacity of the statistical service and to work towards an environment conducive to viable and safe data collection activities. Unfortunately, the latter is beyond the control of the statistical service and the development partners.

b. Country Assessment

The Asia-Pacific region has initiated efforts to evaluate the statistical capacity of its countries. The “Report on Preliminary Assessment of Country Capacity to Produce Agricultural and Rural Statistics” was prepared by FAO RAP and presented to the Steering Group for Agricultural Statistics in July 2012. The preliminary assessment was based on a country assessment questionnaire prepared in the mid-2000s by the FAO Regional Office for Asia and the Pacific and adapted by the FAO Statistics Division in collaboration with partners from the African and Asian regions. The final questionnaire also reflected input from the SGAS. The immediate objective of the country assessment was to examine country capacity to produce a minimum set of core data with a sustainable statistical system. This first assessment served as a basis for the preparation of technical assistance, training, and research programs. This preliminary assessment will be followed by in-depth in-country assessments that will lead to each country preparing Country Proposals for technical assistance, training, and research as needed.

Table 2 below from the preliminary assessment report provides a summary of the critical characteristics of a statistical system by category of country. The summary data are based on the countries responding to the questionnaire⁹.

⁹ It should be noted that the responses were often incomplete for several reasons; one of which was that responses were not always coordinated where agricultural statistics are produced by both the national statistical office and another ministry such as ministry of agriculture.

While most countries have a statistics law, not all include agriculture. Not every country has an NSDS in place and a smaller number have a process in place to coordinate activities producing agricultural statistics across the national statistical system¹⁰.

Only slightly over half of the countries have conducted an agricultural census since 2001. This raises the question for these countries whether they need to use alternative methods to develop a sample frame for agricultural statistics. Data are available for less than half of the global set of minimum core items. This does not take into the account that not all core items will be relevant for every country.

Table 2: Summary of critical characteristics of some Asia-Pacific subregionsⁱ

Sub-region ⁱⁱ	Number of Countries	Number ⁱ Reporting	Stat Law ⁱⁱⁱ	Stat Law /w Agric ⁱⁱⁱ	NSDS ⁱ ⁱⁱⁱ	Coord. "Board" ⁱⁱⁱ	Agric Census after 2001	Ave PCT Core items	Ave PCT Priority items
Southeast Asia	10	10	100	80	70	70	60	42	77
South and Southwest Asia	10	9	100	78	72	44	67	51	78
North/Central Asia	9	7	100	86	100	43	57	48	85
East Asia	7	5	100	60	80	40	60	47	82
Pacific	19	8	100	75	50	13	63	21	38
Developed	3	3	100	100	100	100	100	53	89
Region	58	42	100	79	75	48	64	44	75

i: Some countries reported minimal or partial information, but did respond to the request for a Country Assessment Questionnaire.

ii: Sub regions within Asia-Pacific are defined as those observed by FAORAP. Countries which did not fall under the mandate of FAORAP were categorized according to the sub-regional groupings used by ESCAP (as per Annex L). As a result, sub-regional groupings used for this table include- Southeast Asia: Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste, Viet Nam; South and Southwest Asia: Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka, Turkey; North/Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan; East Asia: China, China Hong Kong SAR, China Macao SAR, Democratic People's Republic of Korea, Mongolia, Republic of Korea, Taiwan Province of China; Pacific: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, Niue, Northern Marianas, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu; Developed: Australia, Japan, and New Zealand.

iii: Presented as a percent of countries reporting.

¹⁰ The number of countries reporting the existence of an NSDS may be an underestimate if the response to the preliminary assessment came only from outside the national statistical office for some of them.

The country assessment questionnaire listed constraints countries face in providing agricultural statistics and asked each country to score the degree of the constraint as shown at the bottom of table 3. The most serious constraints are the number of professional staff, their technical skills, and access to up to date information technology hardware and software. Other areas such as sound methodology and political support are also constraints.

Table 3: Constraints on Agricultural Sector Statisticsⁱ

	Southeast Asia ⁱⁱ	South and Southwest Asia ⁱⁱ	North/Central Asia ⁱⁱ	East Asia ⁱⁱ	Pacific ⁱⁱ	Developed ⁱⁱ
No. of professional staff at headquarters for statistical activities	3.00	3.33	2.67	3.00	3.43	1.00
Technical skills of the available statistical staff	2.00	2.50	2.17	3.00	3.14	1.00
Turnover of professional staff.	2.17	3.33	2.50	3.00	3.17	1.00
Transport equipment for field activities	2.50	3.50	2.33	3.00	3.00	1.00
Funds for field-oriented statistical activities vis-à-vis plans.	3.50	2.83	3.00	3.33	3.00	1.00
Up-to-date information technology hardware	3.50	2.50	2.00	2.67	2.57	1.00
Up-to-date information technology software	3.17	2.33	2.17	2.67	2.86	1.00
No. of field workers for statistical activities	2.67	2.83	3.50	3.33	2.86	1.00
No. of professional staff in the field for statistical activities	2.83	2.67	3.50	3.00	2.86	1.00
Sound methodology implemented for agricultural surveys	2.50	3.67	3.17	2.33	3.17	1.00
Building space for office	2.67	3.50	3.00	2.67	3.00	1.00
Appreciation at the policy-making level for importance of statistical activities	2.83	2.00	2.50	2.00	3.67	1.00
Support at political level in the Government for statistical activities	3.17	2.50	2.33	2.67	3.43	1.00
No. of support staff at headquarters for statistical activities	2.83	1.67	2.17	3.00	3.00	1.00
Level of demand for statistics	2.83	2.83	2.67	2.67	4.00	1.50

i. 1=No constraint; 2=Little constraint; 3=Relative constraint; 4=Significant constraint; 5=Dominant constraint

ii. Sub regions within Asia-Pacific are defined as those observed by FAORAP. Countries which did not fall under the mandate of FAORAP were categorized according to the sub-regional groupings used by ESCAP (as per Annex L). As a result, sub-regional groupings used for this table include- Southeast Asia: Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Thailand, Timor Leste, Viet Nam; South and Southwest Asia: Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka, Turkey; North/Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan; East Asia: China, China Hong Kong SAR, China Macao SAR, Democratic People's Republic of Korea, Mongolia, Republic of Korea, Taiwan Province of China; Pacific: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu; Developed: Australia, Japan, and New Zealand.

iii. Some countries reported minimal or partial information, but did respond to the request for a Country Assessment Questionnaire.

c. Technical Constraints

Many crop production data and other agricultural data series in the region come from administrative reporting systems in which government agricultural personnel assess crop production by observing harvests and by interviewing experts (village heads, farmers, traders) in their assigned localities. Summary statistics from lower levels of government are then transmitted up the hierarchy until they reach the national level. While this data collection approach, compared to censuses and surveys, is less expensive and can provide timely data, research has shown that it is prone to large measurement errors. Data collection officers and others involved in the process have vested interests that influence the estimation process. Agricultural officers tend to over or under-report production in their assigned areas to support their claims of accomplishment.

Administrative reporting does not usually include a validation process that could improve the quality of estimates; nor is it possible to compute objective measures of statistical error. And because only aggregated statistics are available, analysis at the household or farm level is not feasible. The possible links of land and cultivation practices, availability of irrigation, new technology, and the availability of credit, to poverty cannot be determined. Households that are food insecure cannot be accurately profiled and vulnerable areas identified. In general, data-intensive analysis that can inform policy and contribute to better development outcomes in the long term is not forthcoming.

On the other hand, such administrative reporting if properly structured can provide timely, early warnings of rapidly changing conditions as described in “Tracking Results in Agriculture and Rural Development in less-than-ideal conditions: A Sourcebook of Indicators for Monitoring and Evaluation” (FAO and the World Bank 2008)¹¹. Rapid assessment techniques should not be dismissed as long as they are used in tandem with other more objective methods.

Only 25 of 59 countries and territories in the region have regular, nationally representative sample surveys for collecting agricultural statistics and only about half conduct an agriculture census every 10 years. The majority of the agricultural sample surveys are conducted in the agriculture ministry, while the agriculture censuses are produced by the national statistics office. In fact, 18 have irregular data collection systems that depend mostly on the availability of external funding and the remaining 16 reporting countries either do not conduct any household surveys at all or there is no information on surveys in their websites.

d. Institutional Constraints

National statistics laws usually assign censuses to the national statistics office (NSO). In decentralized statistical systems, former or still centrally planned economies, and in countries where the National Statistics Office has been unable to deliver the needed agricultural statistics

¹¹ Global Donor Platform for Rural Development, FAO and World Bank (2008). Tracking Results in agriculture and rural development in less-than-ideal conditions: A sourcebook of indicators for monitoring and evaluation.

on time, the rest of the national agricultural database contents except for the agriculture census are produced and maintained by the agriculture ministry. In such cases, even where there is an NSDS in place, it may not include agricultural statistics which remains outside the national statistical system.

In some countries, the National Statistics Office and the agriculture ministry maintain separate and parallel data collection systems down to local government units. The use of separate and parallel systems causes a duplication of scarce resources and end results that are different and therefore confusing to data users.

e. Summary of the Main Challenges

The countries in the Asia and Pacific region are diverse in size, institutional structures, and statistical capabilities. The main challenges will be to deal with the integration of agriculture into the national statistical system, adding the methodology to support survey based data collections to reduce and/or improve the use of the Administrative Recording Systems, and building the capacity of the national statistical system to produce not only traditional agricultural statistics but also those representing the enlarged scope of agriculture and other emerging requirements..

The next section presents the impact, outcome and outputs, to be realized from the implementation of the Regional Action Plan, designed to address the above challenges.

IV. The Plan—Impact, Outcomes and Outputs

The intended impact of the implementation of the Regional Action Plan is to promote evidence-based policies and programs for poverty reduction, increased food security, and sustainable natural resources management. These are in line with the Millennium Development Goals to “Eradicate extreme poverty and hunger” and “Ensure environmental sustainability”. In the context of the plan, evidence means mainly, though not exclusively, quantitative information or statistics. And statistics will be used also to monitor and evaluate the same policies and programs.

The expected outcome is a significant increase in the availability and quality of agricultural and rural statistics, produced by a sustainable agricultural statistical system with appropriate institutional, human and financial capacity. Availability means the statistics are produced and are easily accessible; quality includes accuracy and timeliness; and relevance has bearing on the needs, such as data that allow broader analysis of economic, social and environmental issues and new data requirements that may emerge during the plan’s implementation period. Timeliness is crucial for many data elements concerning food security and to deal with price volatility. A sustainable agricultural statistics system will be pursued through the coordination and integration