



منظمة الأغذية
والزراعة للأمم
المتحدة

联合国
粮食及
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Food and
Agriculture
Organization
of the
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Organisation des
Nations Unies
pour
l'alimentation
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Продовольственная и
сельскохозяйственная
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Объединенных
Наций

Organización
de las
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para la
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ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

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Agenda Item 5

Issues in the collection of FAO data

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Outline

- 1. Objectives & Challenges in data collection**
- 2. Progress since the last APCAS**
- 3. Measuring data availability**
- 4. Results: Patterns and trends in questionnaire response (2013-2017)**
- 5. Discussions and proposed recommendations**



1. Objectives in FAO Data Collection

- Provide **timely and relevant global data** for evidence-based decision making on complex and inter-linked food and agriculture related issues
 - food security, sustainable agricultural growth, rural resilience & poverty, food loss/waste reduction, etc.
- Compile and **publish internationally comparable data and metadata** collected from countries in FAOSTAT and other data portals



1. Challenges in FAO Data Collection

- **Substantial increase in data requirements** for increasingly complex policy issues and monitoring needs, such as the SDGs and inter-sectoral interlinkages
- **Response burden** on countries, including inconsistencies, and duplication of data requests
- **Incomplete data** reports and need for imputation by FAO
- Need for **alternative mechanisms** for data reporting and collection



2. Progress since the last APCAS

- **FAO advanced and harmonized questionnaire dispatch:**
 1. May – Production, Producer Prices and Government Expenditures in Agriculture (GEA);
 2. November – Land Use, Fertilizer Use, and Pesticide Use

 - Questionnaires now dispatched to heads of institutions to **improve country coordination.**

 - **Reduced duplication & new corporate standards in FAO questionnaires**
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2. Progress since the last APCAS

- **Improved data quality** through peer review process by countries of Agriculture Production data and imputations
- **Improved methodologies** and training on Food Balance Sheet and Government Expenditure on Agriculture data
- **Reduced duplication/country burden** by coordination with regional associations
- **Improvements to FAO Statistical Working System**, to enable piloting of alternative data collection approaches



3. Measuring data availability

- The Statistics Division of FAO (ESS) dispatches 6 annual questionnaires, and collects trade data through electronic trade data files for the following agricultural domains:

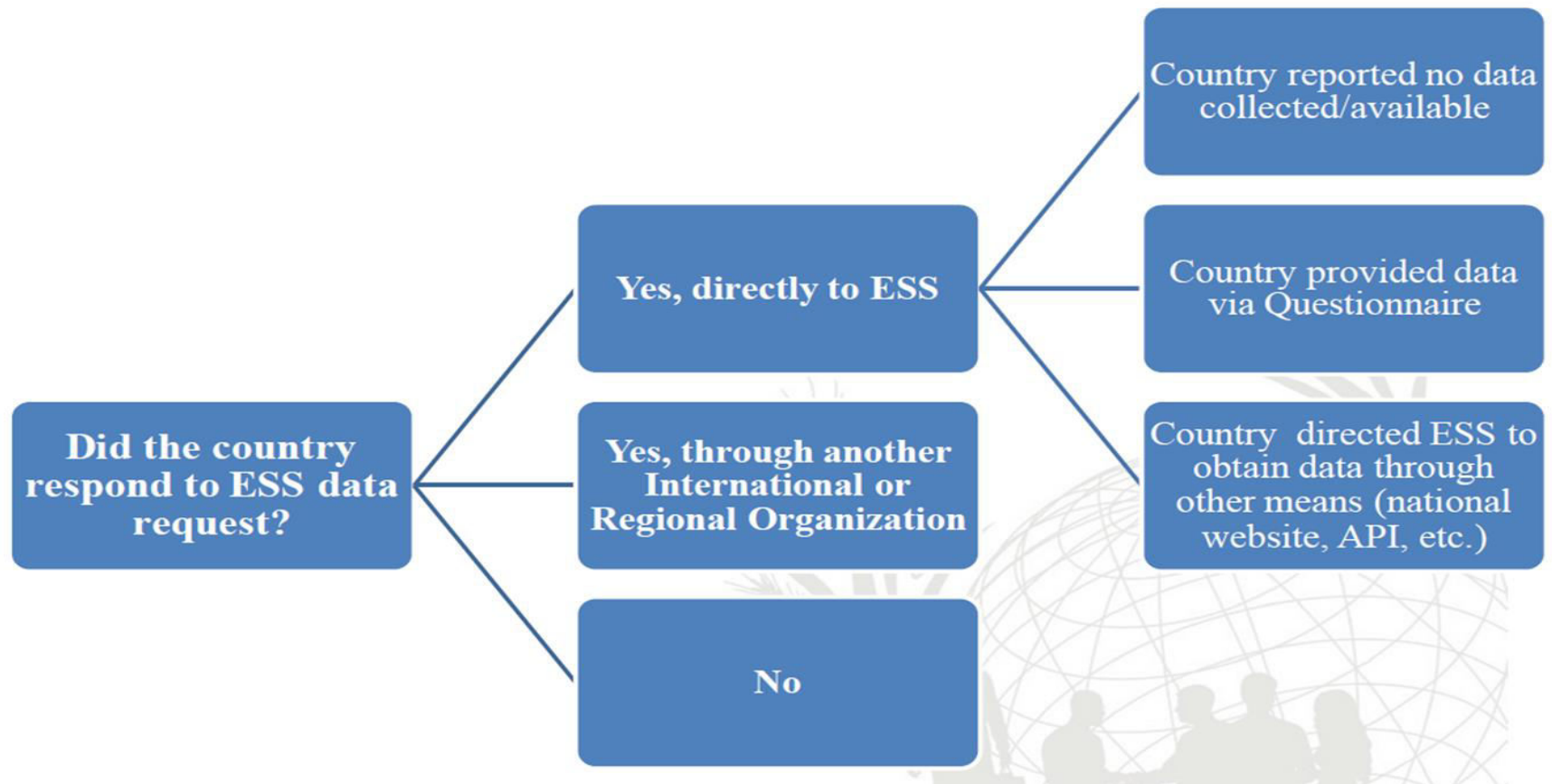
Production Producer Prices Fertilizers
Pesticides Use Land Use
Government Expenditures in Agriculture (GEA)



3. Measuring data availability (cont'd)

- Response rates and data completeness indicators compiled by to measure data availability and data quality:
 - Countries in Western and Central Asia excluded from analysis.
 - France, the United Kingdom and the United States, though APCAS members, also excluded.
 - For the People's Republic of China, special administrative regions (SARs) and the province of Taiwan treated as separate respondents from mainland China.

3. Measuring response and non-response



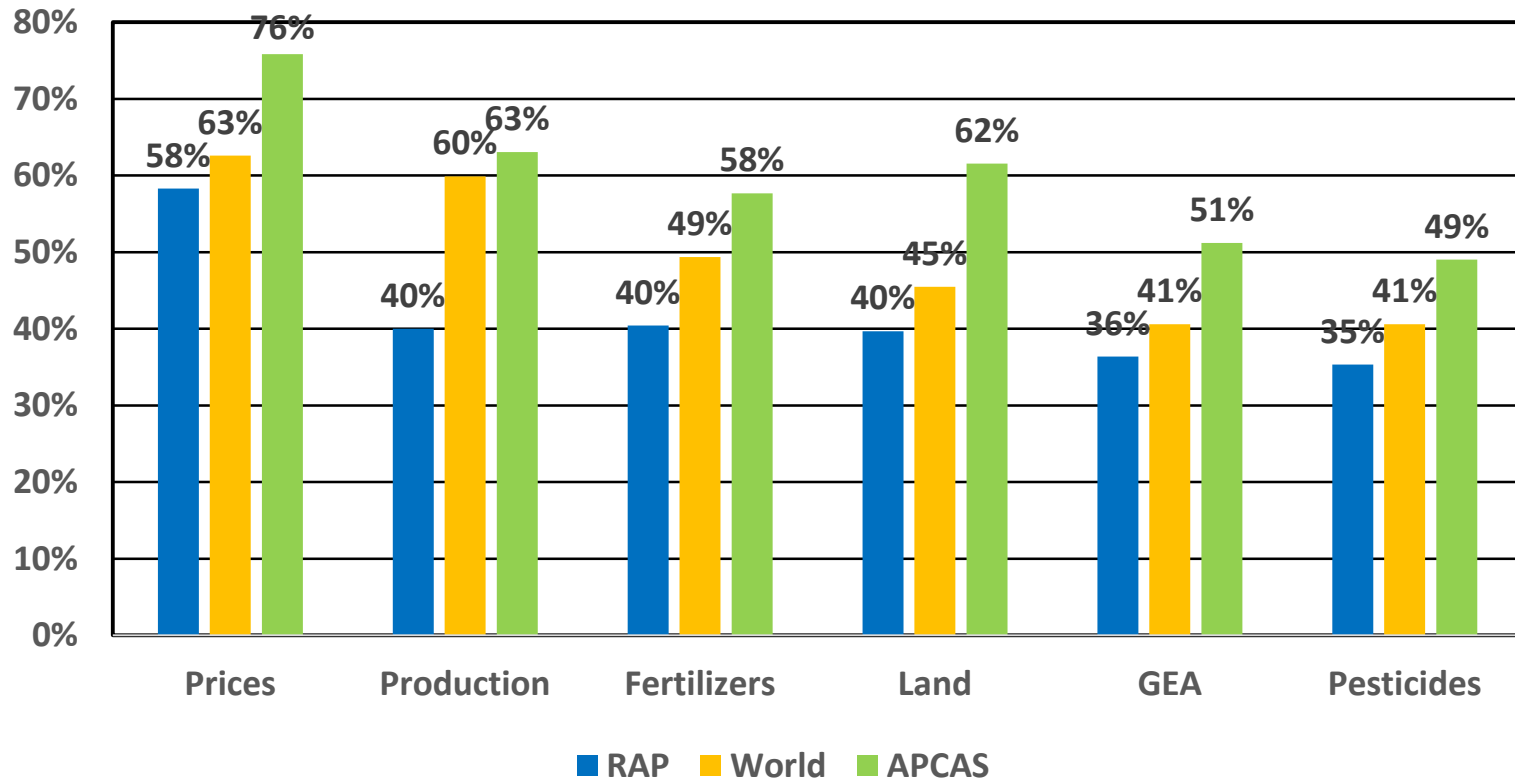


4. Results: APCAS members outperform the world in average questionnaire response; region lags behind.

- Average 2013-2017 responses rates highest in Producer Prices followed by Production and Land Use, Fertilizers, GEA and Pesticides Use.
- APCAS Members outperform the World average; but entire region collectively lags behind.

4. Results: APCAS members outperform the world in response, while region performs more poorly.

Average 2013-2017 response rates, by domain





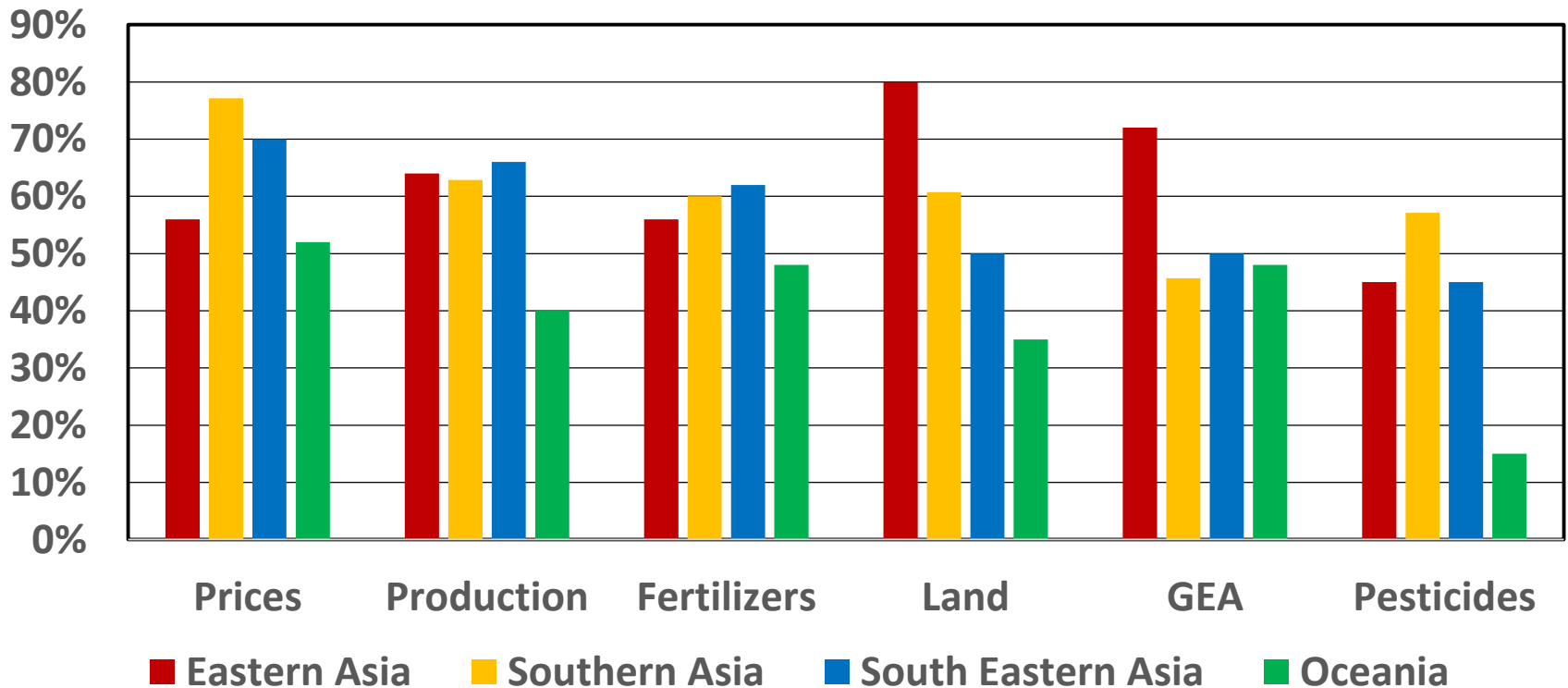
4. Results: Response rates vary by domain, though higher for APCAS members compared to region as a whole.

Average response rates by domain and membership status, 2013-2017

	APCAS Members			All RAP countries			Maximum requests sent
	Average response	Average response rate	Number of recipients	Average response	Average response rate	Number of recipients	
Production	3.2	63%	25	2.0	40%	47	5
Pesticide Use	2.0	49%	25	1.4	35%	46	4
Land Use	2.5	62%	25	1.6	40%	46	4
Fertilizers	2.9	58%	25	2.0	40%	46	5
Producer Prices	3.8	76%	23	2.9	58%	35	5
GEA	2.6	51%	24	1.8	36%	42	5

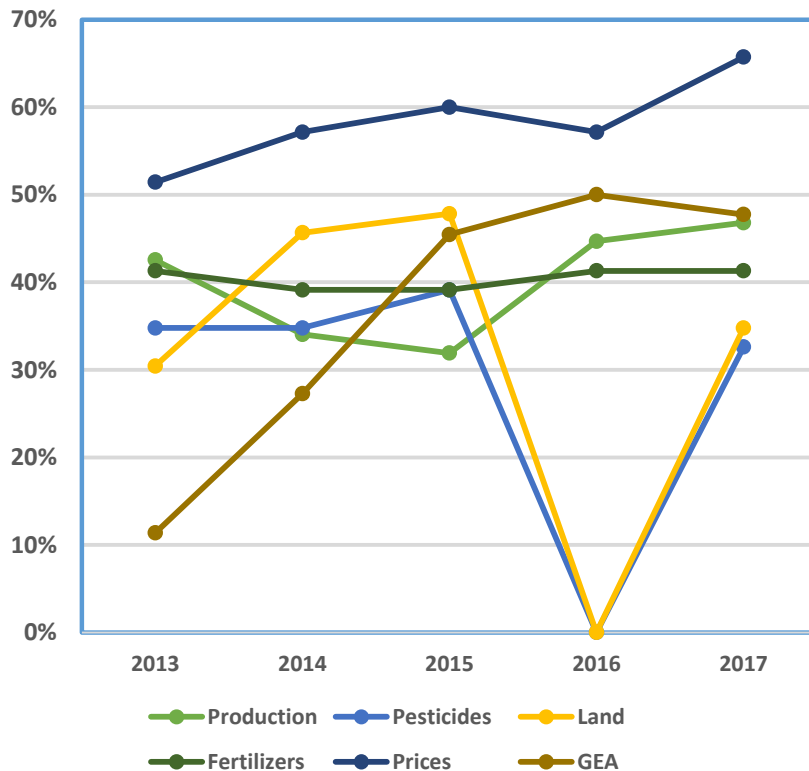
4. Results: Across sub-regions, Prices and Production had higher response rates; Oceania lagged behind

Asia and Pacific average response rates

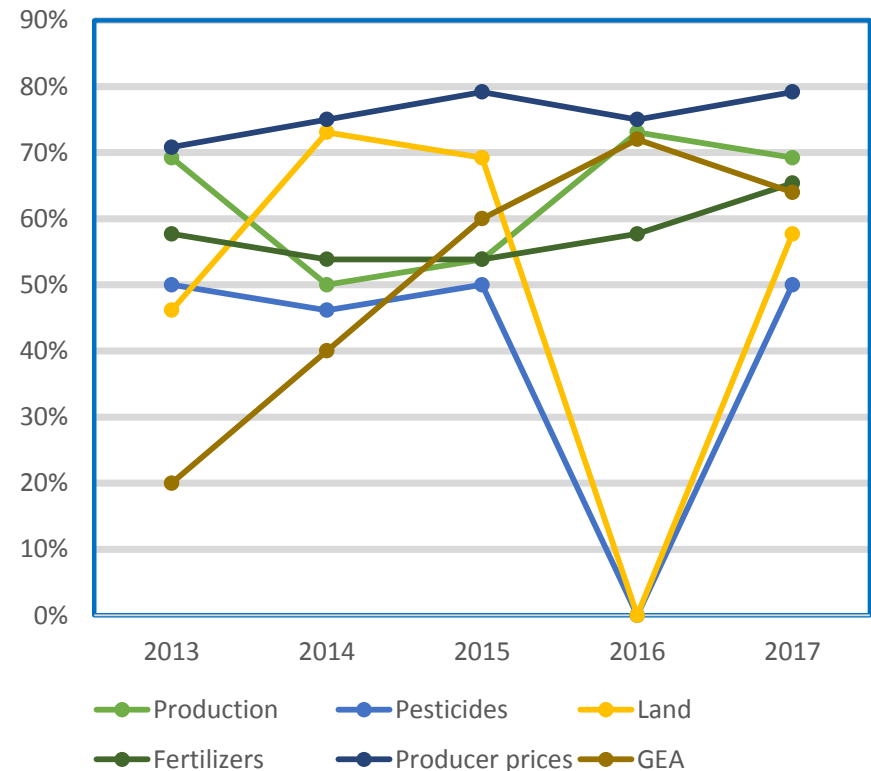


4. Results: Across time, response rate trends vary across domains and membership status, led by Producer Prices

Asia and Pacific response rates



APCAS members response rates



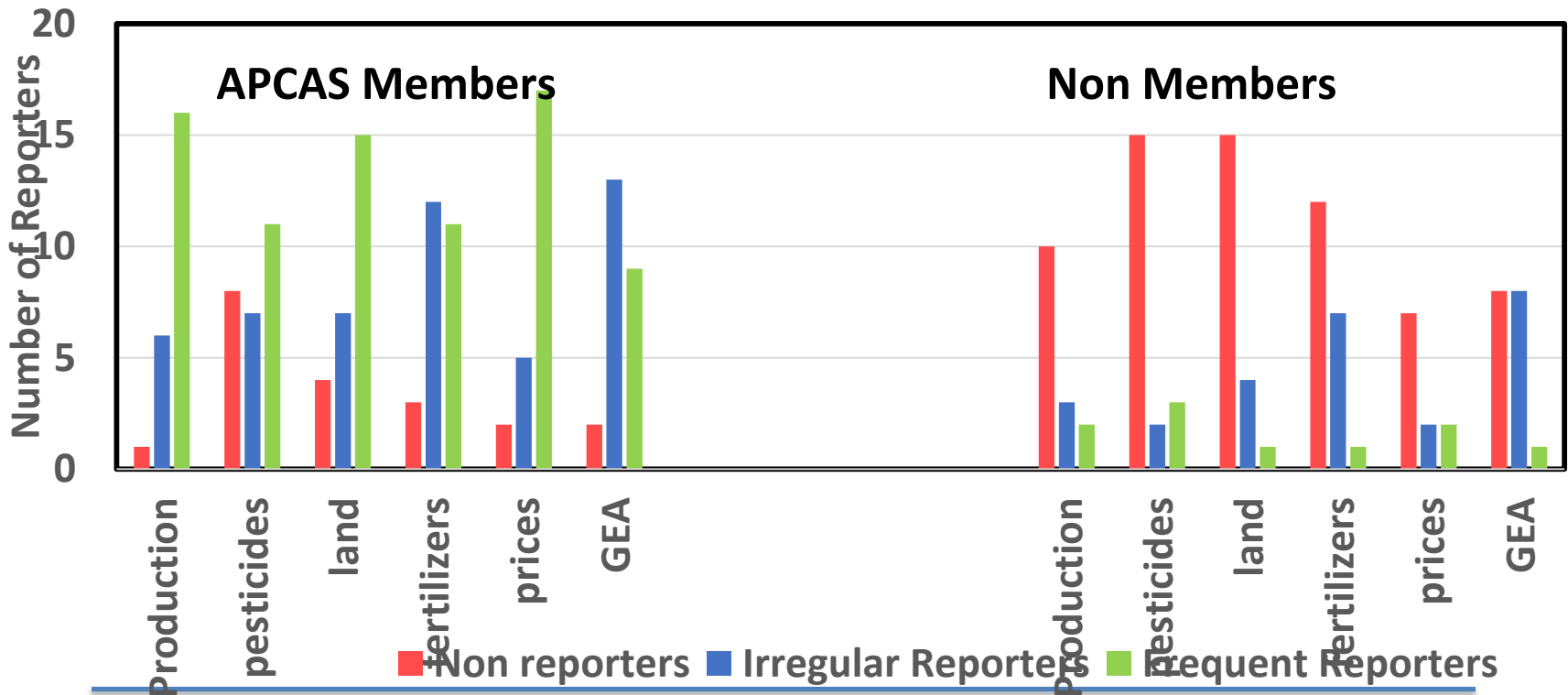


4. Results: Classification of reporters, by domain and frequency of responses

Domain	# of mail-outs: 2013 to 2017	Frequency		
		Never/ None	Irregular	Frequent
Production	5	0	1-3	4-5
Pesticides Use	4	0	1-2	3-4
Land Use	4	0	1-2	3-4
Fertilizers	5	0	1-3	4-5
Producers Prices	5	0	1-3	4-5
GEA	5	0	1-3	4-5

4. Results: APCAS member more likely to report frequently; non-members more likely to never respond.

Reporters by domain, type and Membership status, 2013-2017





4. Results: APCAS members reporting frequency, by country and domain

	Production	Pesticide Use	Land Use	Fertilizers	P. Prices	GEA
Afghanistan	frequent	Irregular	Irregular	Irregular	Irregular	Irregular
Australia	frequent	Irregular	frequent	frequent	frequent	frequent
Bangladesh	frequent	Irregular	frequent	frequent	frequent	Irregular
Bhutan	frequent	frequent	frequent	Irregular	frequent	Irregular
Cambodia	Irregular	Non	Non	Irregular	Irregular	Irregular
China, HK		frequent	Irregular	Irregular	Non	frequent
China, Macao		frequent	frequent	frequent		frequent
China, Mainland	Irregular	Irregular	frequent	frequent	frequent	frequent
China, Taiwan province of		Non	Non	Irregular		
Fiji	Non	Irregular	Non	Non	Irregular	Irregular
India	Irregular	Non	Irregular	Non	Irregular	frequent
Indonesia	frequent	Irregular	frequent	Irregular	frequent	Irregular
Iran (Islamic Republic of)	frequent	frequent	frequent	frequent	frequent	Irregular
Japan	frequent	frequent	frequent	frequent	frequent	Non
Lao People's Democratic Republic	frequent	frequent	Irregular	Irregular	frequent	Non
Malaysia	frequent	frequent	Irregular	frequent	frequent	Irregular
Mongolia	frequent	Non	frequent	Irregular	frequent	Non
Myanmar	frequent	frequent	Irregular	Non	frequent	Irregular
Nepal	Irregular	frequent	Irregular	frequent	frequent	Irregular
New Zealand	frequent	Non	frequent	Irregular	frequent	Non
Pakistan	Irregular	Non	frequent	frequent	Irregular	Non
Philippines	frequent	Irregular	frequent	frequent	frequent	frequent
Republic of Korea	frequent	Non	frequent	Irregular	Non	
Sri Lanka	Irregular	frequent	Non	Irregular	frequent	Non
Thailand	frequent	frequent	frequent	frequent	frequent	frequent
Viet Nam	frequent	Non	frequent	Irregular	frequent	Irregular



4. Overall results in response rates and areas for improvement

Successes

- ✓ Thailand, Japan, Philippines and Australia responded frequently in at least 4 domains and irregularly in no more than once.

Challenges

- ✓ Non-response or infrequent response makes estimation/imputation of missing data more difficult, which is compounded by incomplete data



5. Further Proposals to improve response & questionnaire completeness

FAO

- Continue to harmonize questionnaires, sent to heads of responding institutions to enable country coordination.
- Develop alternative data reporting/ collection means

Country-level:

- Establish national focal point across ministries/agencies
- Undertake imputations at country-level
- Inform on non-standard units of measure and Technical Conversion Factor used; provide complete metadata



APCAS members are invited to:

- Nominate country focal point for questionnaire coordination across ministries/agencies
- Inform FAO of any non-standard units of measure and Technical Conversion Factor used; provide complete metadata.
- For non-respondents, complete and submit the 2016 questionnaires.



Proposed recommendations, for discussion

It is recommended that:

- To improve response rates and questionnaire completion:
 - a) the FAO regional statistician, FAO HQ, and countries *continue* to improve coordination mechanisms: maintain up-to-date national focal point(s); endorse and implement new methodological guidelines; peer-review data and methodologies;
 - b) FAO pilot multiple-mode data collection, such as on-line questionnaires; and select member countries volunteer to pilot new data sharing technologies with FAO.



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Thank you