

**APEC High Level Policy Dialogue
Enhancing Public and Private Partnership To Reduce Food Losses and Waste
for a Sustainable APEC Food System**

**APEC Survey Report on No-regret Solutions
for Food Loss and Waste Reduction**

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Background:

Summary of 1st Survey Report

Respondents: 16 MEs

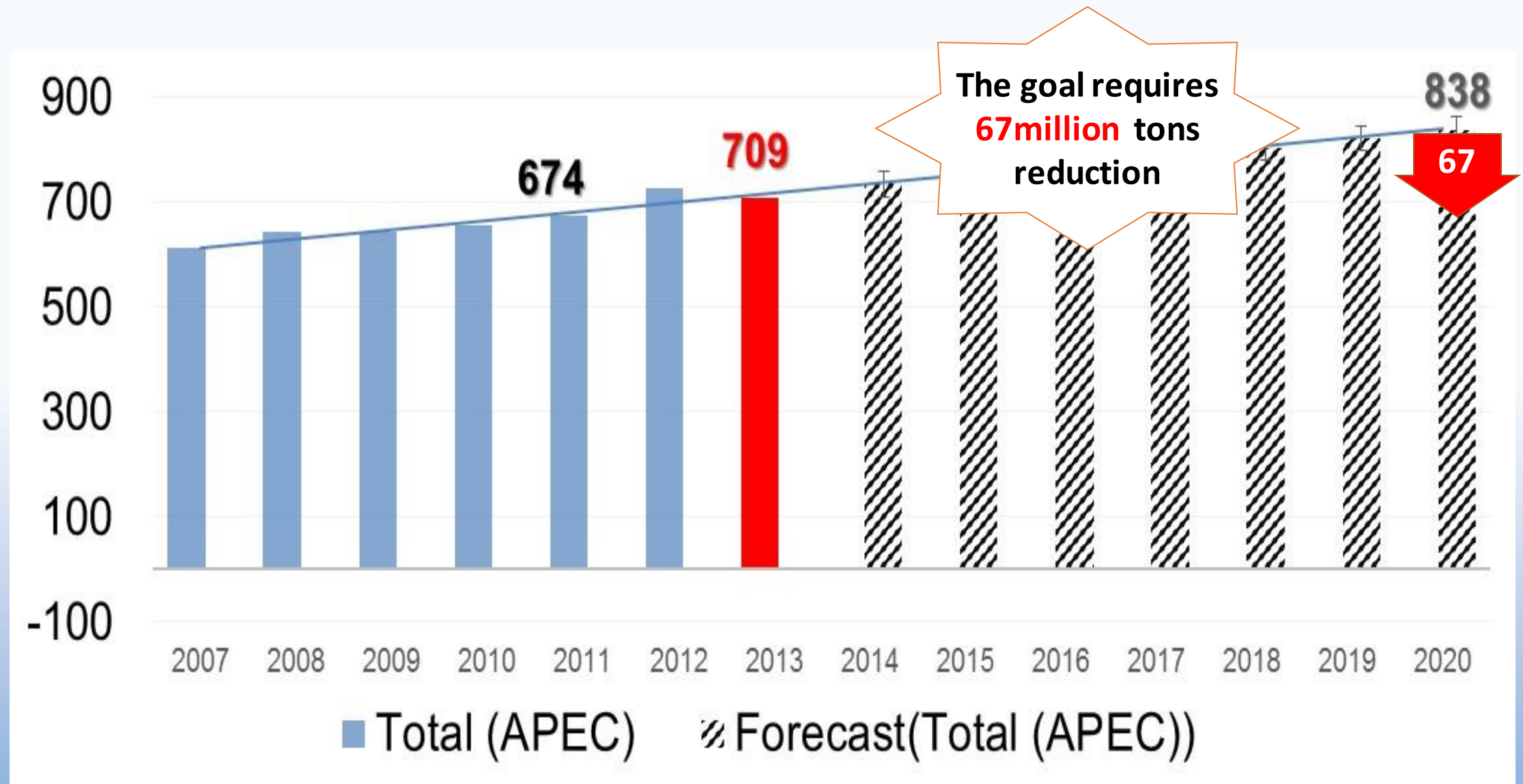
- **6 Advanced MEs:**

- Focus on food waste recovery and recycling
- 10% target attainable

- **10 Developing MEs:**

- Focus on food loss occurring in production
- Less confident on reaching the 10% target
 - Consumer awareness.
 - Insufficient funding
 - Lack of clear objective & reliable data systems.

Estimate the 10% FLW reduction goal by 2020



Source: "APEC Food Security Roadmap Towards 2020", Third Senior Officials' Meeting, Beijing, China, 2014; and our estimation.

☞ Stock-take targets, policies and strategies for FLW

☞ Gather information of FLW quantification and verify them

**2nd Survey
OBJECTIVES**

☞ Identify potential, costs, and benefits of reducing FLW

☞ Investigate PPP barriers and recommendations.

Survey Implementation

- PPFS and ATCWG representatives
- March ~ May, 2018.

APEC No-regret Solutions on Food Losses and Waste Reduction Survey

(APEC Multi-Year Project: M SCE 02 2013A)

APEC Economy	
Respondent's Information	Name:
	Position:
	Agency:
	Email (if available):

Q1. Economy's Targets, Policies and Strategies for Food Loss and Waste (FLW) Reduction

1.1 Are you involved in FLW reduction programs/projects/activities in your economy?

☐ Yes ☐ No

If "Yes", please specify

.....

.....

1.2 Does your economy have a FLW reduction target?

☐ Yes ☐ No

If "Yes", please describe what this is, when it was set, and by whom.

.....

.....

1.3 Does your economy have FLW reduction policy/plans at economy-wide level?

☐ Yes → go to 1.4 ☐ No → go to Q2

If "Yes", please specify the name of the policies/plans and the official link if available

.....

.....

1.4 Is FLW reduction policy/plans mainstreamed into agricultural development plans in your economy?

☐ Yes ☐ No

If "Yes", please give some details on the tools/approaches used for mainstreaming and implementation

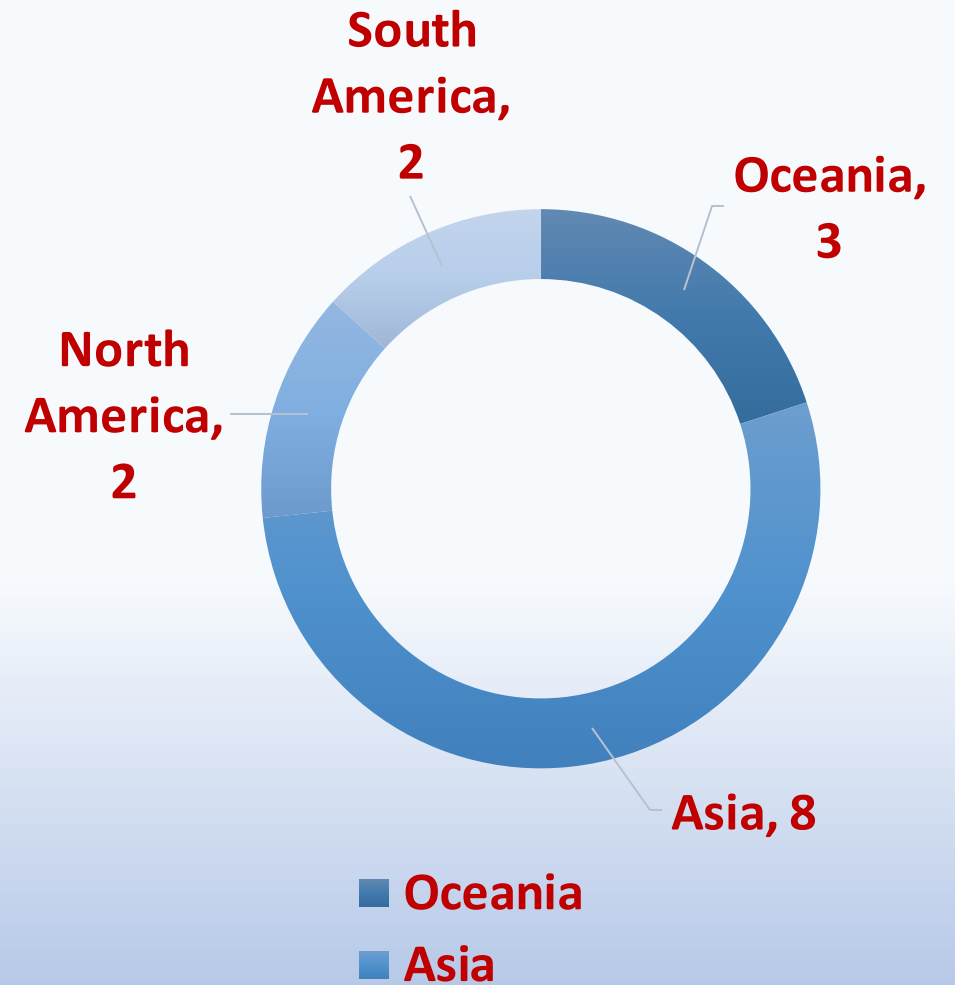
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Respondents

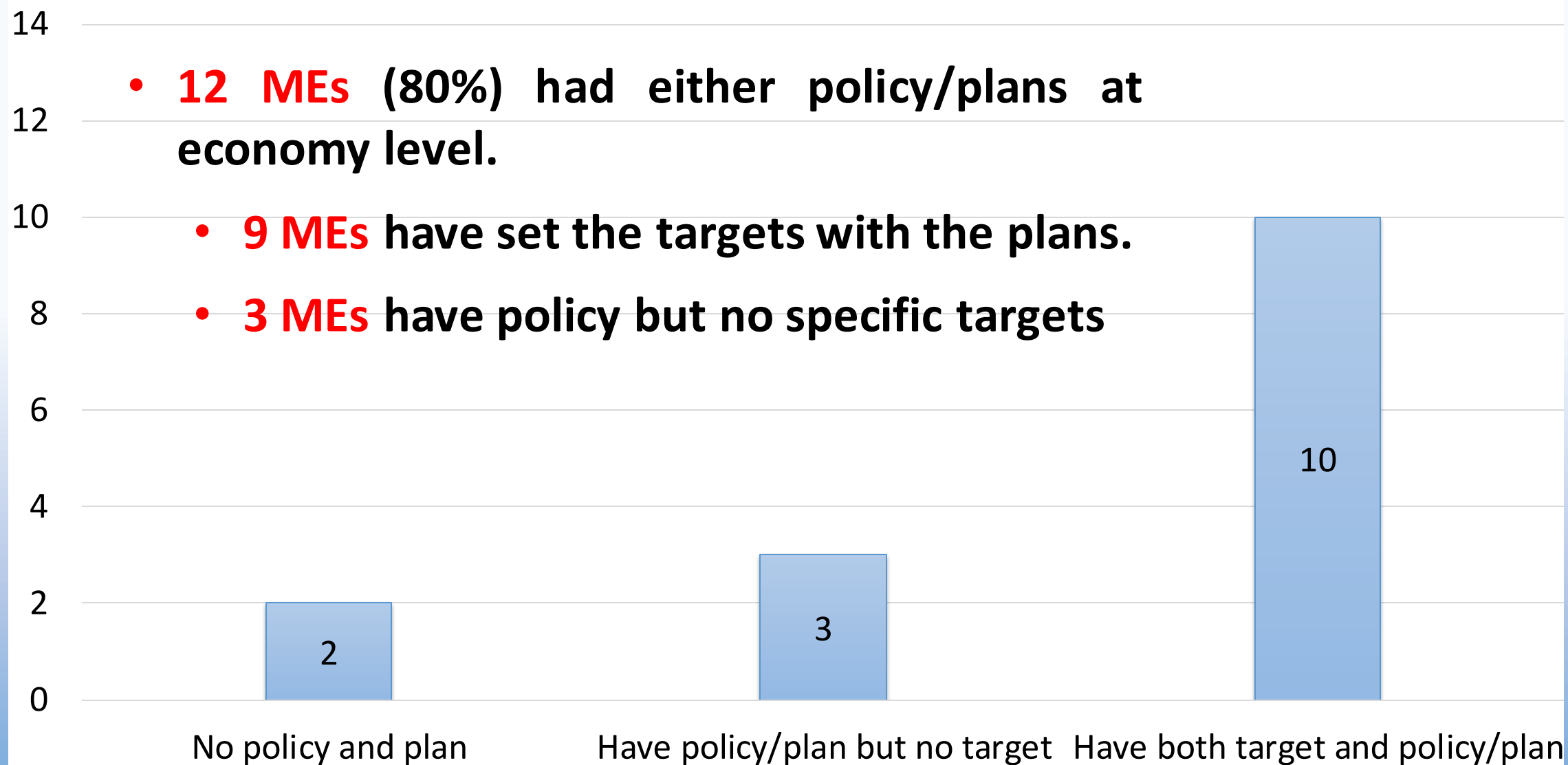
15 MEs responded:

- ✓ Accounting for 71.4% of APEC MEs
- ✓ Geographical distribution is evenly spaced
 - 8 Advanced MEs
 - 7 Developing MEs



1. Policy Targets and Strategies for FLW Reduction

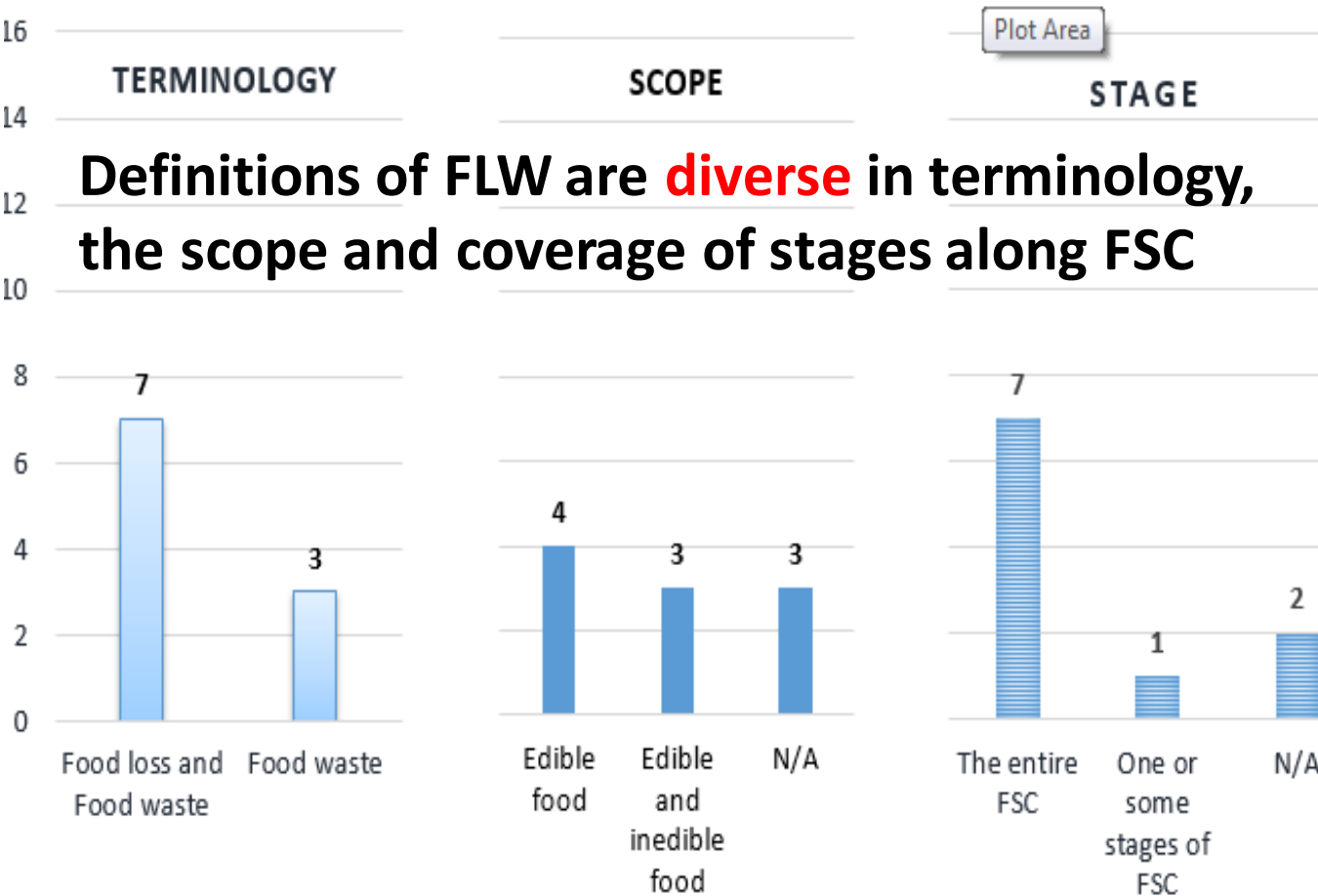
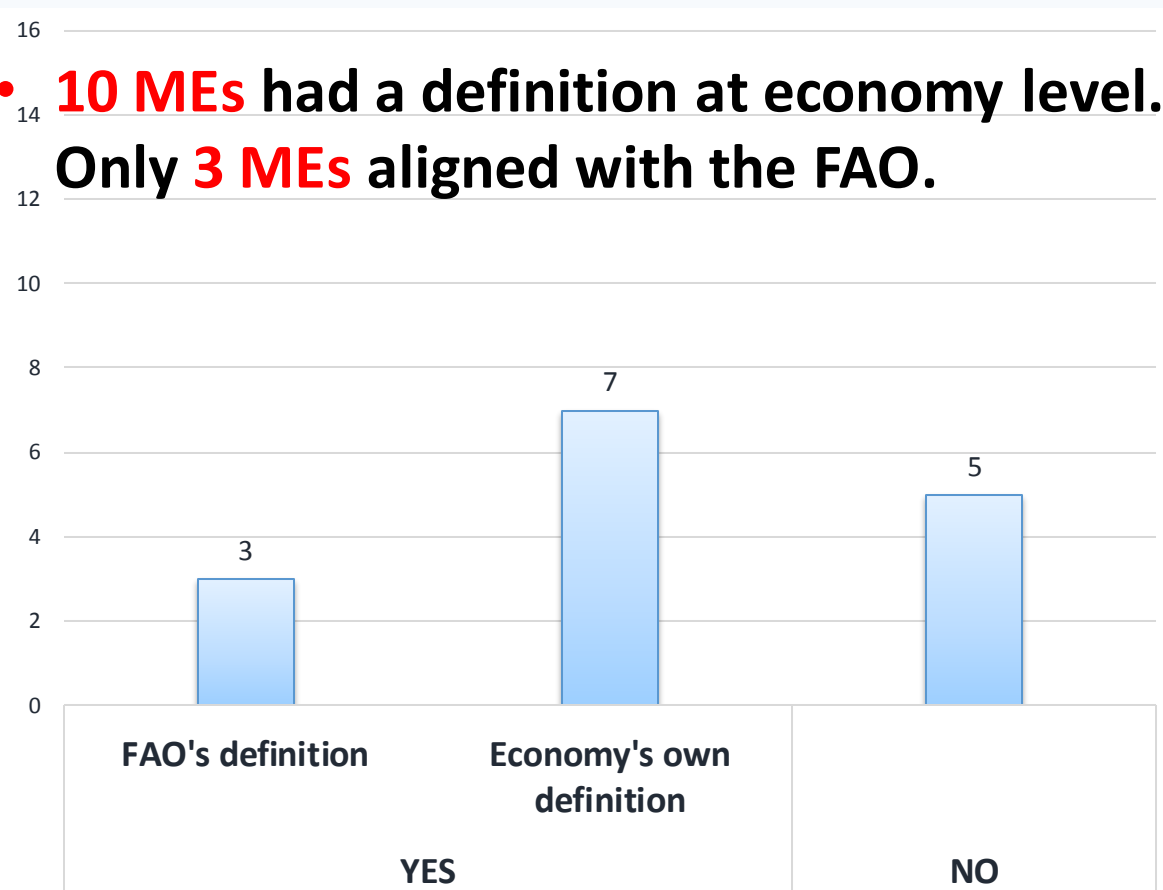
- **12 MEs (80%)** had either policy/plans at economy level.
- **9 MEs** have set the targets with the plans.
- **3 MEs** have policy but no specific targets



2. Quantification of FLW in APEC MEs

2.1 Definition of FLW

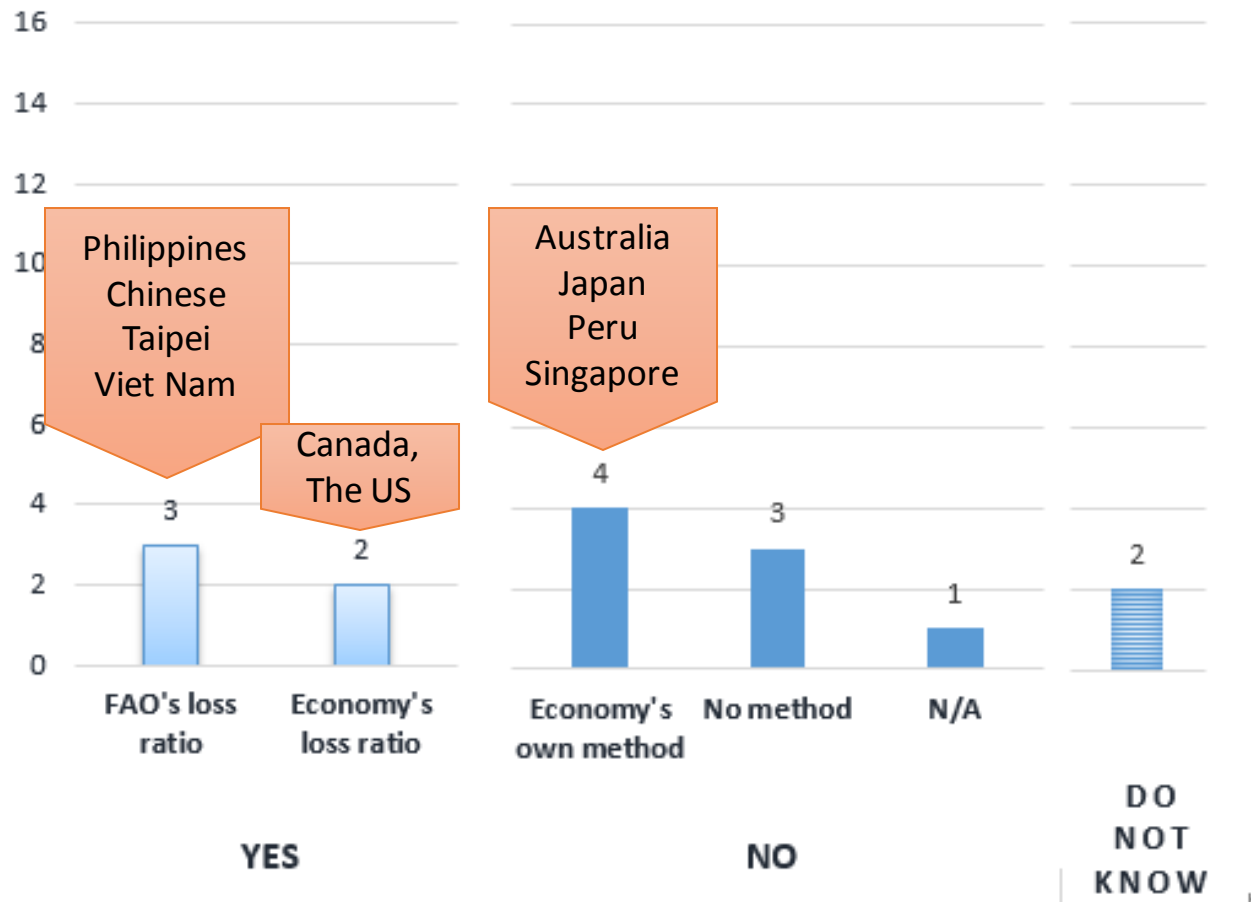
- 10 MEs had a definition at economy level. Only 3 MEs aligned with the FAO.



2.2 Quantifying method



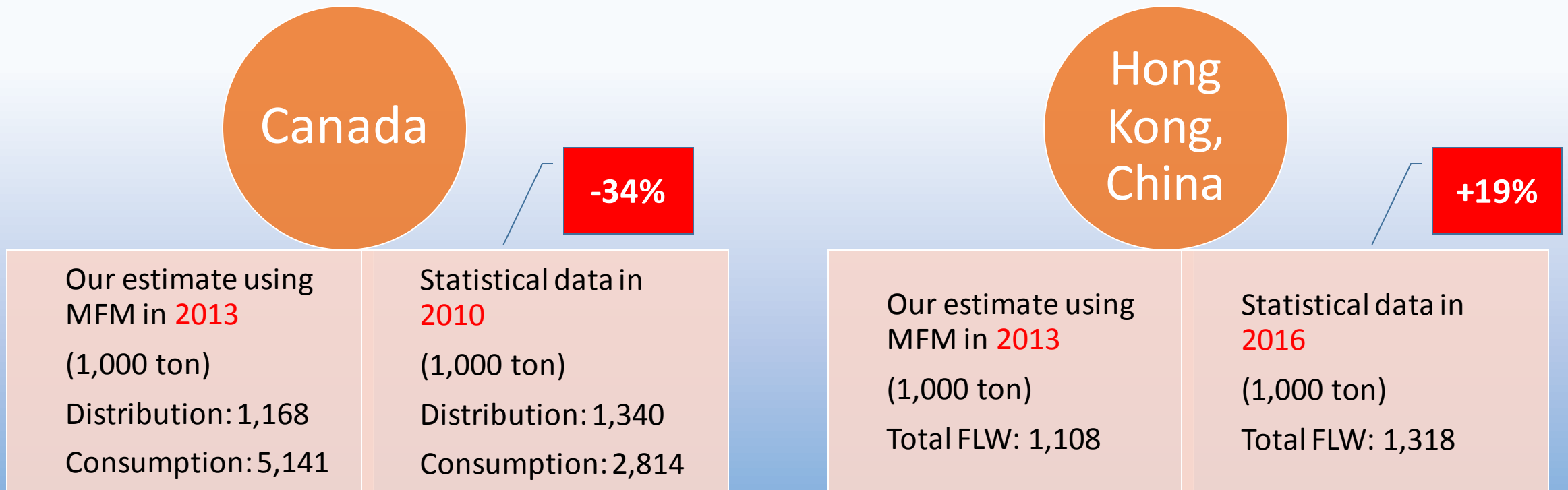
Does your economy adopt the Mass Flow Method suggested by FAO (2011) to quantify FLW?



- **US:**
 - based mainly on inference.
 - develops supply and use balance sheets for over 200 individual commodities.
- **Japan**
 - mandatory regular repost system since 2007, in accordance with Food Recycling Law.
- **Peru**
 - projects focusing on quantifying different agricultural products;
 - different methods to fit the products at best.

2.3 Validation of the FLW Quantity

- **10 MEs** provided us with their statistics for FLW.
 - **None** provide a complete estimate due to the lack of a systematic method
- Quantity came from the advanced economy group.
 - Developing ME mainly provide the **percentage** of main crops.

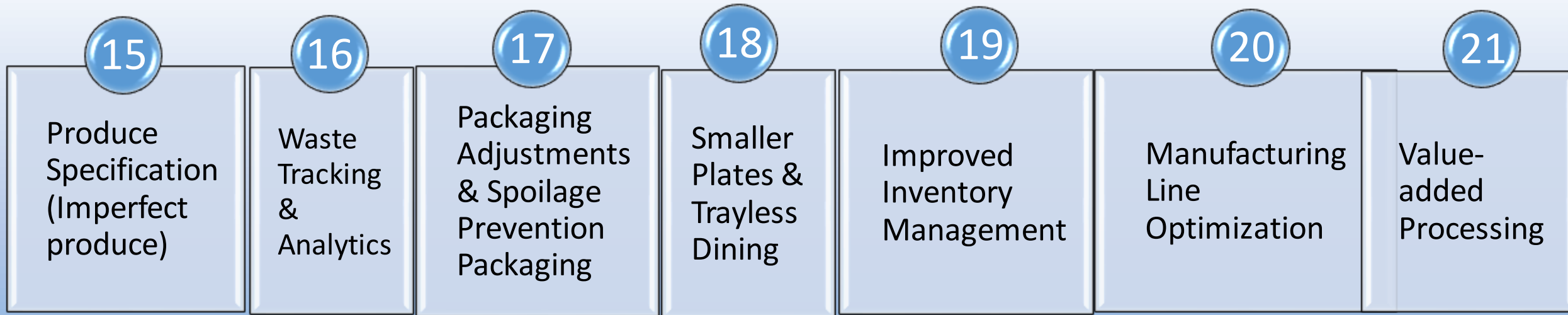


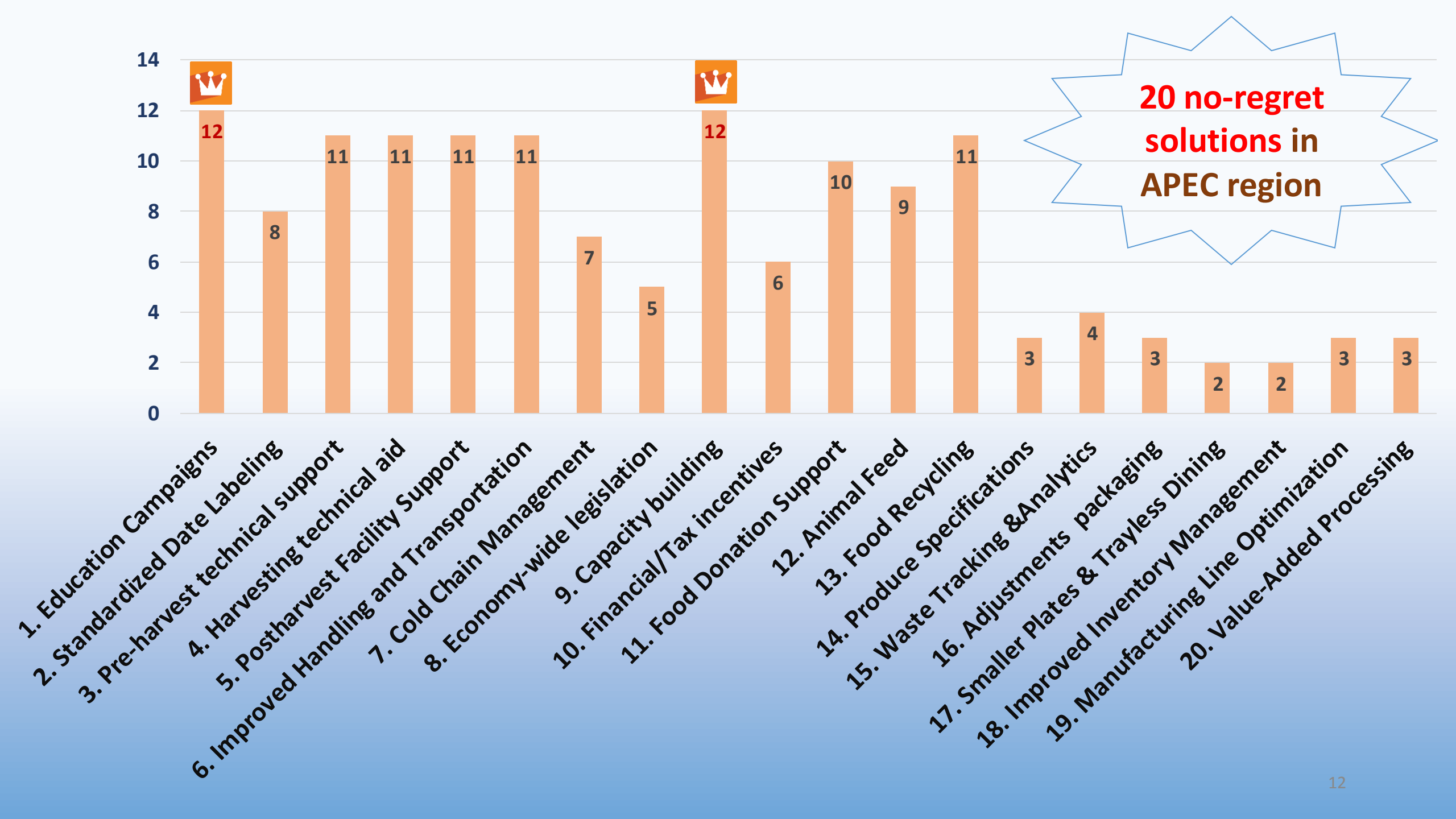
3. No-regret options, potentials and cost of implementation



How many solutions listed on the table have been implemented in your economy?

Beside the **original 14 solutions**, the respondent provided **7 extra options**:





Challenges of implementation

- It is **cheaper to landfill** food waste rather than to donate (edible), compost (inedible), or recover and redirect uneaten food to another use.
- Food firms will adopt a loss-reducing practice if the **benefits outweigh the costs**.

Economic factors



- Lack of **R&D funding**, human resources, and **infrastructure**.
- Implementation on technologies.
- Application **standards, enforcement and legislation**.
- **Food safety** issue in food donation.

Technological factors



- Lack of **incentives** to support changes to divert waste from landfill.
- Limited demand for the end products of **composting**.
- **Logistics** of getting wholesome food distributed timely
- Lack of interest from **consumers**.

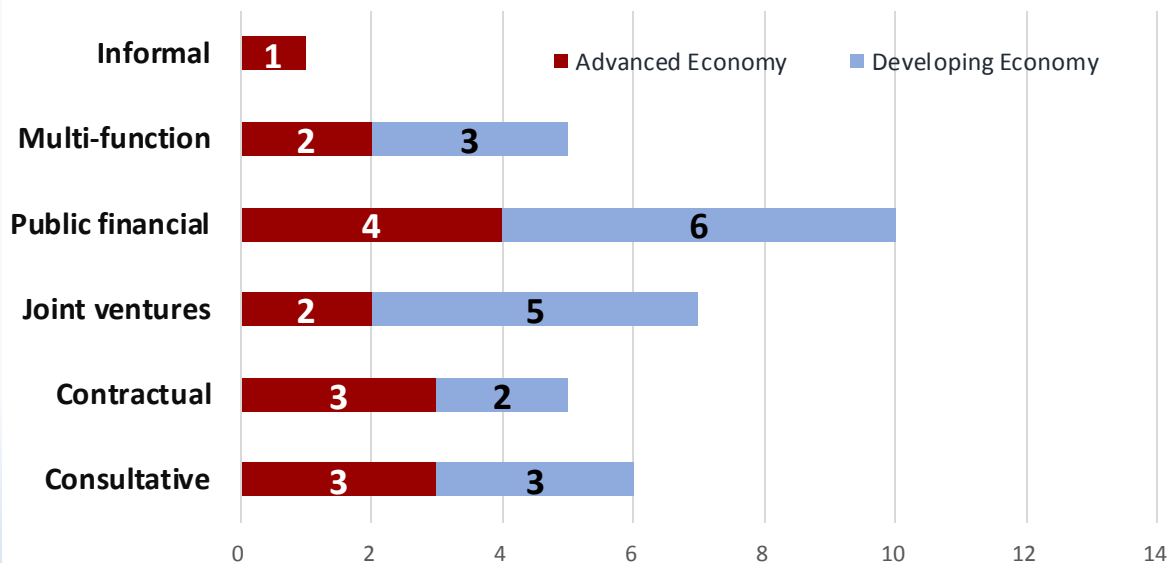
Food waste handling/disposition factors



4. Public-Private Partnership (PPP) on FLW Reduction

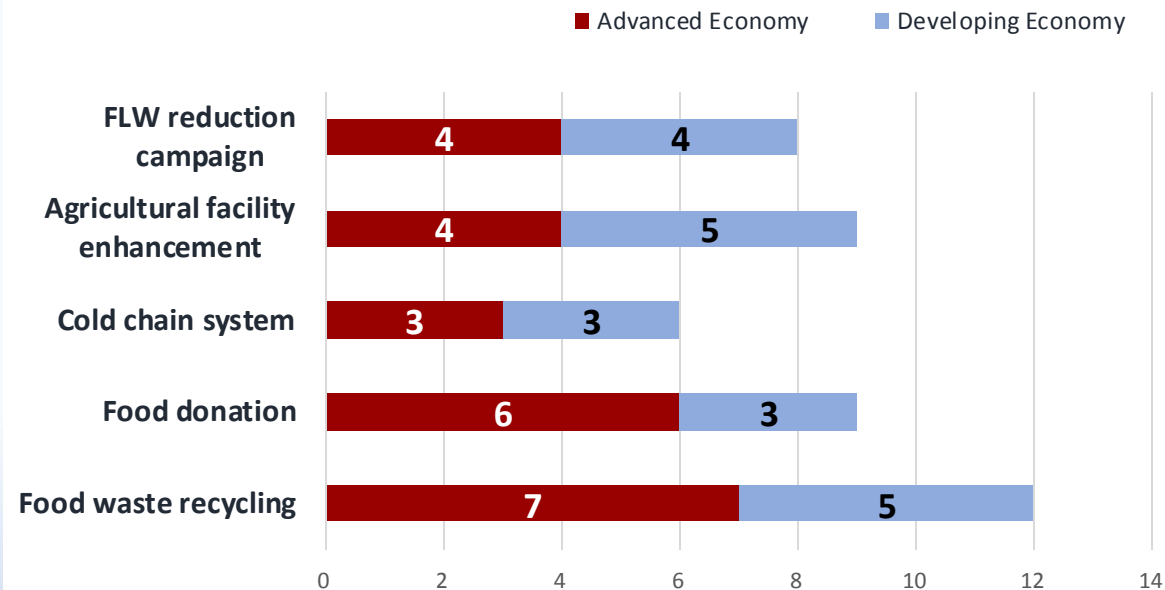
- ✓ Implementation of PPP on FLW reduction by type and area
- ✓ Indicators of a successful PPP project,
- ✓ Strengths, weaknesses and improvements needed.

Q: What types of PPP have been applied in your economy?



- **Public financial support** is the most popular type of PPP
- Joint ventures PPP is more prevalent in developing MEs.

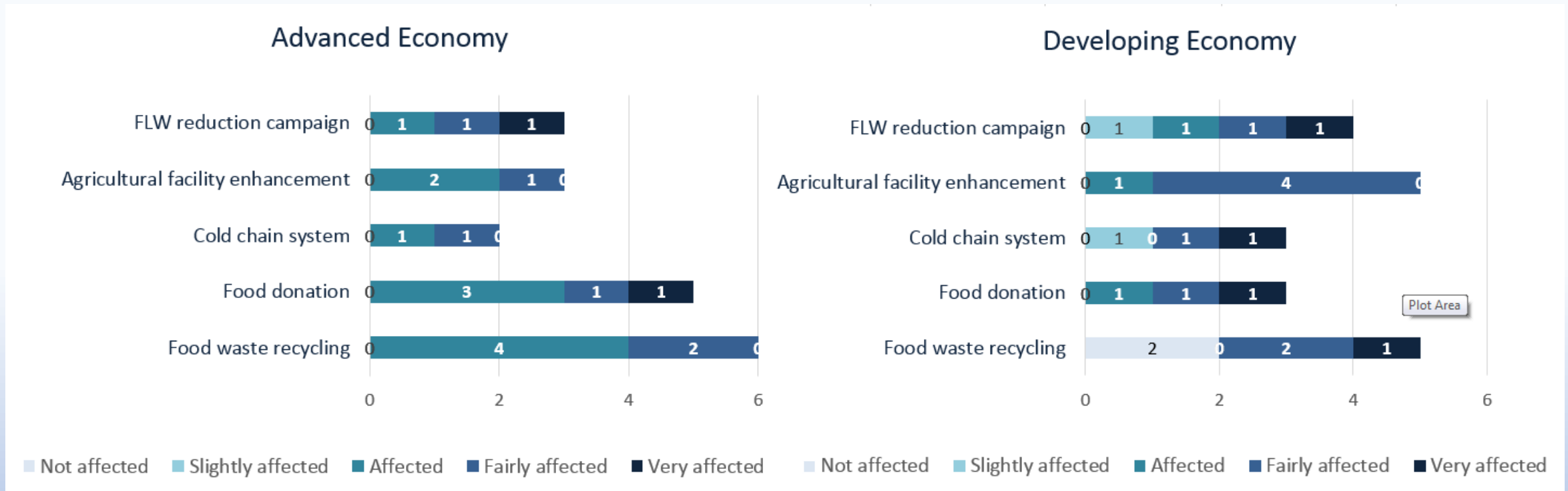
What areas of reducing FLW that PPPs have been applied in your economy?



- PPP has covered the most in **food waste recycling** with 12 APEC MEs.
 - Advanced: 7 out of 8 PPP in food waste recycling
 - Developing:
 - PPPs across all areas evenly
 - agricultural enhancement and food waste recycling slightly above others



*Of the areas listed in figure 7, what areas **have been affected** by the current PPP?*



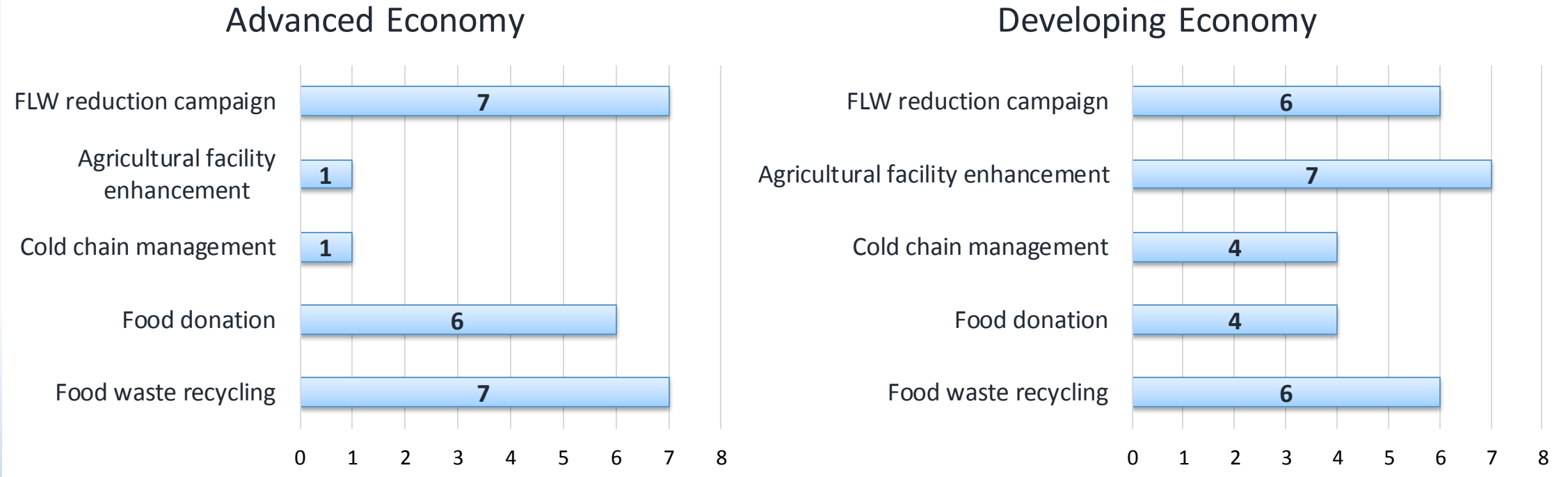
	Food waste recycling	Food donation	Cold chain system	Agricultural facility enhancement	FLW reduction campaign
Average score	3.0	3.8	3.6	3.6	3.8
Advanced	3.3	3.6	3.5	3.3	4.0
Developing	2.8	4.0	3.7	3.8	3.5

-Advanced ME:
most affected in Food donation and recycling.

-Developing ME:
Most affected in Food donation and agricultural facility



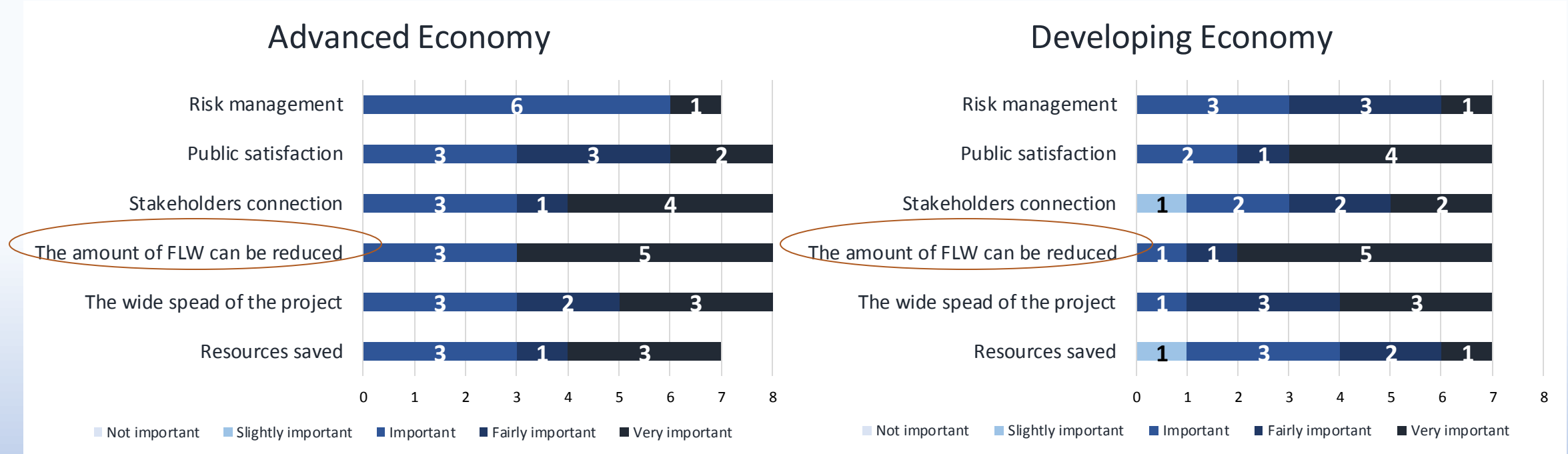
What areas of FLW reduction should PPP focus on?



- Both advanced and developing MEs agreed that **reduction campaign and food waste recycling** should be conducted with dominant advocates.
- Developing MEs strongly recommend **agricultural facility and cold chain improvement** for further PPP applications.



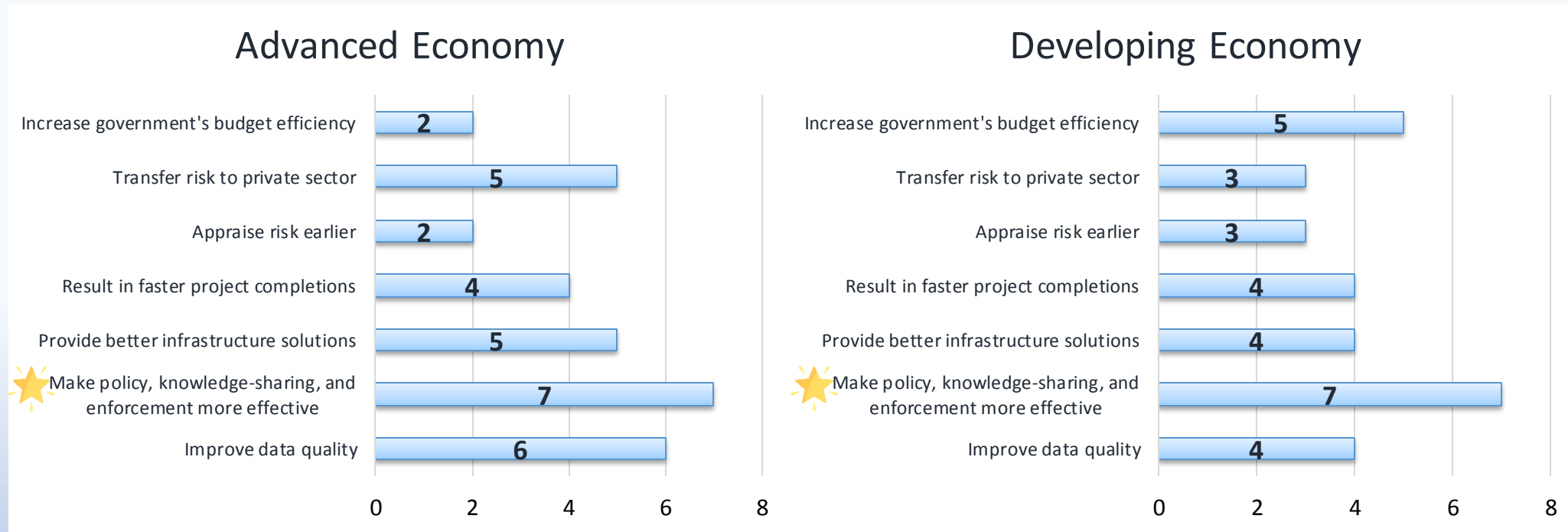
What do you think are the key indicators of a successful PPP project on the areas of FLW reduction?



- The most important indicator: **The amount of FLW can be reduced**
- Advanced MEs: **The resources saved** and **Stakeholder connection**
- Developing MEs: **Public satisfaction**



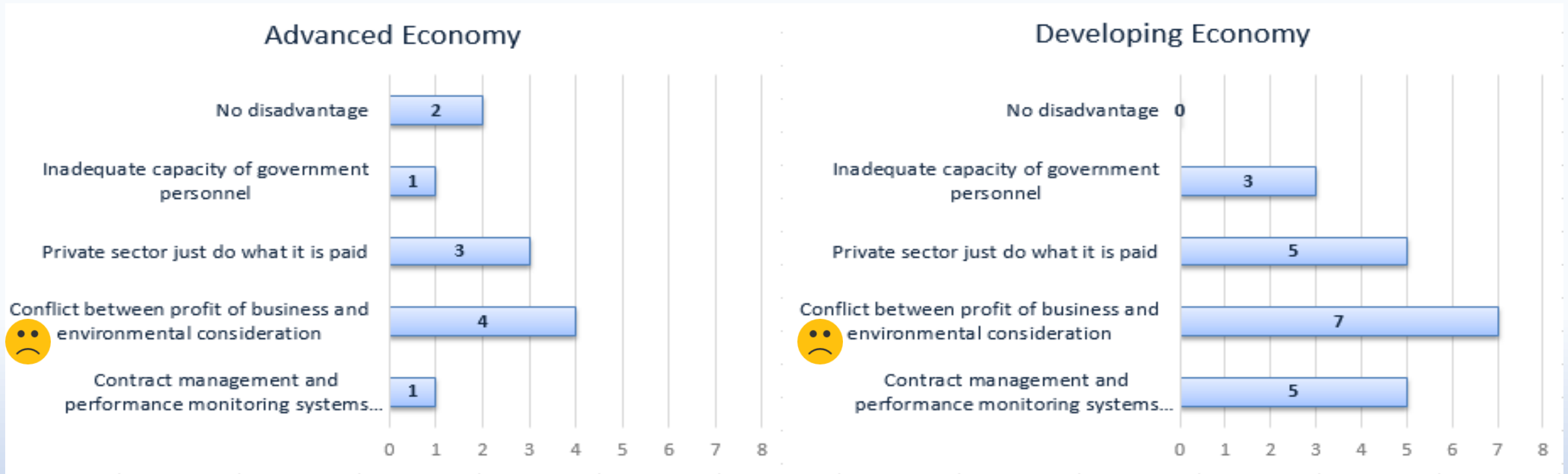
What are the strengths of applying PPP on reducing FLW?



- **Major Advantage: improve performance of policy, knowledge-sharing, enforcement.**
 - **Advanced MEs: improve data quality on quantifying the amount of FLW**
 - **Developing MEs: improve government's budget spending efficiency.**



What are the disadvantages of applying PPP on reducing FLW?



Major Disadvantages: Conflict between business' gain and the environmental impact

- Advanced MEs: Private sector own interests
- Developing MEs: lack of contract management skills

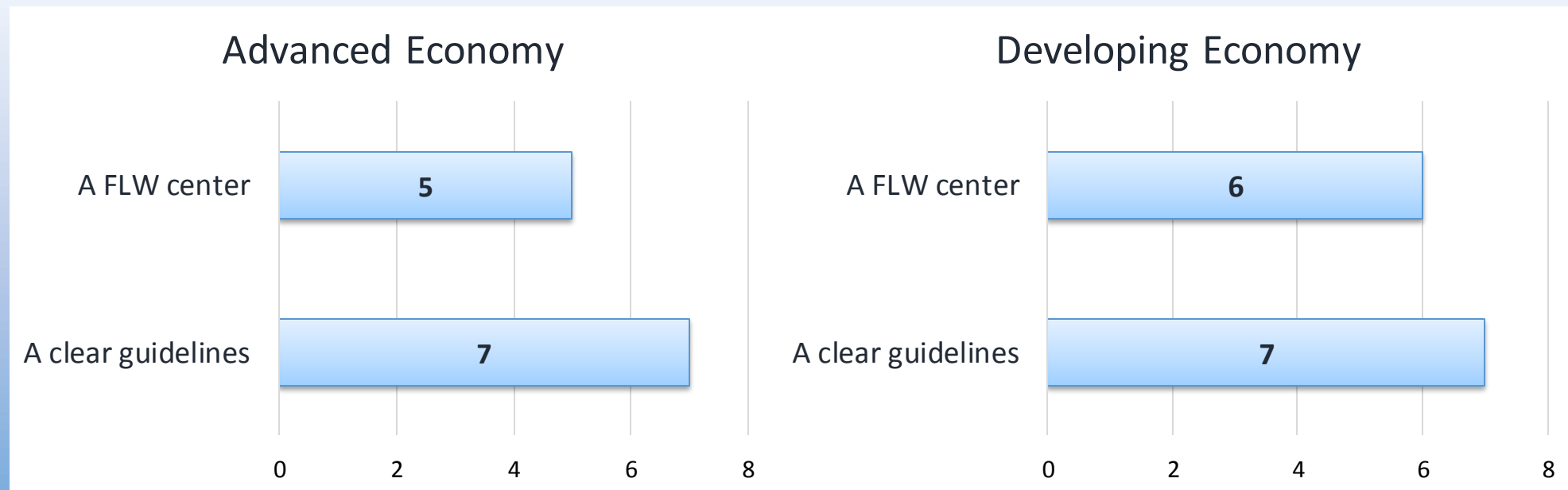


What reasons will make you opt for PPP?

Both advanced and developing MEs agree that both the FLW center and guidelines are in urgent need of supporting the implementation of PPP

14/15 MEs answered that a **clear guideline of PPP** on FLW is needed.

11/15 MEs expressed that an **FLW centre** can be established.



KEY FINDINGS AND CONCLUDING REMARKS

Overview of policy target and measurement

- Reduction targets have been set and policies/plans have been enacted in 12 MEs. The others, might have targets and FLW reduction programs at states/provincial levels.
- FLW definitions vary in terminology, scope, and quantification methods. Most advanced MEs have a quantification method or have been in a process of designing a quantification system for FLW.

Overview of no-regret solutions and challenges

- Most APEC MEs have been conducting no-regret solutions on reducing FLW in both governmental entities and businesses.
- The implementation of 20 APEC no-regret solutions face **three main challenges** (economic, technological and disposition factors)

Overview of PPP on reducing FLW

- The most popular form of PPP currently conducting in APEC members is public financial support.
- Agricultural facility enhancement PPP has a great influence in developing MEs. In advanced MEs, food waste recycling and food donation are two main areas affected.
- The larger the amount of FLW a PPP project can reduce would lead to a better PPP in FLW reduction. In addition, a successful PPP should be spread-out or scaled up widely.



**THANK YOU
&
COMMENT WELCOME**

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