



**Asia-Pacific  
Economic Cooperation**

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**2013/SOM1/PPFS/012**

Agenda Item: 11

**APEC Multi Year Project - Strengthening  
Public-Private Partnership to Reduce Food Losses in  
the Supply Chain (2013-2017)**

Purpose: Consideration  
Submitted by: Chinese Taipei



**Policy Partnership on Food Security Meeting  
Jakarta, Indonesia  
25-26 January 2013**

14 January, 2013

Dear APEC/PPFS colleagues,

We are pleased to announce that Chinese Taipei will propose an APEC multi-year project entitled ***“Strengthening Public-Private Partnership to Reduce Food Losses in the Supply Chain”***, starting from 2013 to 2017, which is a cross-fora project submitted through the APEC/ATCWG and PPFS. And I am pleased to inform you that this project has been endorsed by the ATCWG and there are 12 co-sponsors from member economies by today.

This project is proposed in line with the following ministerial and leaders' declarations:

- (1) 2010 APEC Niigata Declaration on Food Security, in which it stressed: “We encourage APEC economies to cooperate in reducing food losses in all stages in the value chain from production and processing to distribution and consumption by sharing best practices” ;
- (2) 2012 APEC Kazan Declaration on Food Security, which highlights the significance of “decrease post-harvest losses” in order to “achieve sustainable agricultural growth”; and
- (3) 2012 APEC Economic Leaders' Declaration, in which APEC leaders determined to “reduce post-harvest losses along the entire food supply chain...”

According to the FAO, the world's population is expected to grow by nearly 30%, to 9.1 billion people by 2050, and it will require a 70% increase in food production and a 50% rise in investment in agriculture to feed the demands from these extra 2 billion people. Based on the UN's research, roughly one-third of the edible parts of food produced for human consumption, gets lost or wasted globally, which is about 1.3 billion ton per year. For fruit and vegetables, post-harvest losses can be as high as 50% or more. Therefore, it is of vital importance to strengthen partnership among public and private sectors of APEC economies in developing measures and solutions on reducing post-harvest losses and waste, as well as enhancing food quality and safety, so as to contribute to food security in the Asia-Pacific region.

Given that APEC is composed of developed and developing economies, the food loss issue raises more concerns to developing economies, whereas the food waste issue to developed economies. Since the complexity of food loss issue can take place in any stage of the entire food supply chain, such as crop harvesting, handling, packaging, storage, processing, transport, marketing, food preparation to the dining table, this proposed project needs to be implemented with a multi-year approach, in order to ensure the success of the project.

In short, the goals of this multi-year project include:

- (1) To identify key issues on reducing post-harvest losses and costs of the entire food supply chain and improving food safety and quality in the APEC region;
- (2) To seek best practices in private and public sectors on reducing post-harvest losses and costs, to enhance the role of public-private partnership (PPP) along the entire food supply chain, and to reinforce policy coordination among APEC economies; and
- (3) To search and identify practical solutions and best practices, to enhance capacity-building on reducing food losses and costs as well as improving food safety and quality, and to develop a consolidated methodology of APEC food losses assessment, thus contributing to safeguarding food security in the APEC region.

As outlined in the concept note of this project attached to this letter, this project will hold various seminars and workshops each year with different themes and focuses. In the last year of the project, a high-level meeting will be held to deliberate the findings, action plans, policy recommendations, and a consolidated methodology of APEC food losses assessment.

We would be very grateful to receive APEC Members' inputs and suggestions on the themes and training programs of this project. Should you have any suggestion, please do not hesitate to contact me and my colleagues (Dr. Su-San Chang, email: [susan@mail.coa.gov.tw](mailto:susan@mail.coa.gov.tw), Ms. Tracy Tarnng, email: [tracyt@mail.coa.gov.tw](mailto:tracyt@mail.coa.gov.tw), [tracycoa@hotmail.com](mailto:tracycoa@hotmail.com) and Ms. Emilia Chen, email:

chenyh@mail.coa.gov.tw)

On behalf of the organizing committee of the project, I am greatly honored to seek your support of the **APEC Multi-Year Project of Strengthening Public-Private Partnership to Reduce Food Losses in the Supply Chain**, and looking forward to receiving your positive response. In order to meet the deadline on CN submission for APEC session 1 funding support in 2013, I would assume that your economy is supportive to the project if I did not hear from you by **25 January 2013**.

Sincerely yours,

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### APEC Multi-Year Project: Concept Note

|  |  |  |        |
|--|--|--|--------|
| <b>Project Title:</b>  | Strengthening Public-Private Partnership to Reduce Food Losses in the Supply Chain   |  |        |
| <b>Source of funds</b> (Select one):                           | <input type="checkbox"/> Operational Account <input type="checkbox"/> TILF Special Account <input checked="" type="checkbox"/> APEC Support Fund |  |        |
| <b>Sponsoring Committee:</b>                                   | SCE (SOM Steering Committee on ECOTECH)  |  |        |
| <b>Associated Working Group / Sub-fora / Task-force(s):</b>    | Agricultural Technical Cooperation Working Group (ATCWG)   |  |        |
| <b>Proponent economy:</b>                                      | Chinese Taipei   |  |        |
| <b>Co-sponsoring economies:</b>                                | Canada, Chile, Japan, Republic of Korea, New Zealand, Papua New Guinea, Peru, the Philippines, Singapore, Thailand, the United States, Viet Nam  |  |        |
| <b>Other Working Groups / Sub-fora / Task Forces involved:</b> | Policy Partnership on Food Security (PPFS)   |  |        |
| <b>Other non-APEC stakeholders involved:</b>                   | ABAC, International Rice Research Institute (IRRI); International Livestock Research Institute (ILRI); WorldFish                                 |  |        |
| <b>Expected start date:</b>                                    | Jan. 2013  |  |        |
| <b>Expected completion date:</b>                               | Dec. 2017  |  |        |
| <b>Total amount being sought from APEC (USD):</b>              | USD 498,184  |  |        |
| <b>Total co-funded amount (USD):</b>                           | USD 636,600  |  |        |
| <b>Total project cost (APEC + Co-funding) (USD):</b>           | USD 1,134,784  | <b>% of co-funding to total project cost</b> | 56.10% |

| APEC funds: Estimated disbursement schedule                            | Year 1  | Year 2 | Year 3 | Year 4 | Year 5  |
|--|---------|--------|--------|--------|---------|
| <i>(funds may be drawn down over a maximum of five calendar years)</i> | 137,024 | 77,812 | 77,812 | 77,812 | 127,724 |

**Project Overseer Information and Declaration:**

**Name:** Su-San CHANG

**Title:** Director General

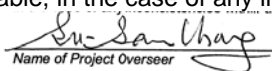
**Organization:** Department of International Affairs, Council of Agriculture

**Postal address:** No. 37, Nan-hai Rd., Taipei

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As Project Overseer and on behalf of the above said Organization, I declare that this submission was prepared in accordance with the **Guidebook on APEC Projects** and any ensuing project will comply with said Guidebook. Failure to do so may result in the BMC denying or revoking funding and/or project approval. I understand that any funds approved are granted on the basis of the information in the document's budget table, in the case of any inconsistencies within the document.

  
 Name of Project Overseer

**Date:** 20 Dec., 2012

## Project Synopsis

### **1. Summary:** Describe the project in under 200 words. Your summary should include the project topic, planned activities and an outline of possible timing, locations and activities.

According to the FAO, the world's population is expected to grow by nearly 30%, to 9.1 billion people by 2050, and it will require a 70% increase in food production and a 50% rise in investment in agriculture to feed the demands from these extra 2 billion people. Based on the UN's research, roughly one-third of the edible parts of food produced for human consumption gets lost or wasted globally, which is about 1.3 billion ton per year. For fruit and vegetables, post-harvest losses can be as high as 50% or more. Therefore, it is of vital importance to strengthen partnership among public and private sectors of APEC economies in developing policy recommendations and solutions on reducing post-harvest losses and waste, as well as enhancing food quality and safety, so as to contribute to food security in the Asia-Pacific region.

Since APEC is composed of developed and developing economies, the food loss issue raises more concerns to developing economies, whereas the food waste issue to developed economies. The former may be addressed by more extensive education of farmers in the causes of post-harvest food losses, improved infrastructures to connect small-scale farmers to markets, effective value chains that provide sufficient financial incentives at the farmer level, collective marketing and improved technologies supported by access to microcredit, and public-private partnership (PPP) sharing the investment costs and risks in market-oriented interventions; the latter may require more efforts on taxation, legal regulations, consumer education campaigns, etc., to reducing food wastes.

The project aims to address post-harvest losses in all stages of the entire food supply chain in the APEC region by strengthening cooperation of public and private sectors. In addition to generating feasible solutions, policy recommendations, and action plans for lowering food losses, this project intends to improve food quality and safety and to develop a consolidated methodology of food losses assessment suitable to APEC economies. This project is planned to be implemented in three phases within five years. **In Phase I** (2013), a Focal Point Network (FPN), containing experts, private sectors, and officials from members of ATCWG and PPFS, on a voluntary basis, will be organized as the core unit for implementing the project. The members of FPN will provide assistance and guidance to the completion of a pioneering study in investigating the current status and critical issues of post-harvest losses in the APEC region. A seminar, providing a broad understanding of post-harvest food losses, identifying key issues, and facilitating exchanges of best practices from public and private sectors among APEC economies, will be held in August 2013 in Chinese Taipei, and it will pay special attention to reduction of food losses on food crops as a major illustrated example in this phase.

**Phase II** (2014-2016) focuses on food losses issues of different foods for three consecutive years. In 2014, the focus will be concentrated on reducing post-harvest losses of fruit and vegetables. In 2015, the main theme will be fishery and livestock products. In 2016, the topic will be moved to food wastes issues occurred on the food consumption, including how to reduce food wastes from individual household's food preparation, supermarkets, to restaurants. In this phase, the variety of technology-oriented workshops and seminars with emphasis on capacity building will be held. **Phase III** (2017) is to generate the final conclusion of policy recommendations, action plans, and a consolidated methodology of APEC food losses assessment. FPN will conclude research results, draft policy suggestions, and develop a methodology of APEC food losses assessment as major outputs for a following high level policy meeting to be held in 2017. This high-level meeting is designed for the discussion of the findings and policy outputs provided by FPN, in order to deliberate on the next steps and the final deliverables to APEC.

### **2. Relevance:** Why should APEC undertake this project? What problem or opportunity will the project address and why is it important to APEC's agenda? Describe how the project will help achieve APEC's key priorities and meet your forum's work-plan and medium-term plan.

The population in the APEC region accounts for 41% of world population and 53% of global cereal production and almost 70% of fish production. Nevertheless, according to the research conducted by the UN Industrial Development Organization (UNIDO), post-harvest losses in Asia alone are estimated at 30% of global food production annually, valued at \$5 billion, and the number of food losses in the Asia-Pacific region is expected to be higher. In light of increasing importance of food security in APEC's agenda, reducing food losses has become one of the most critical issues to achieving sustainable growth of agriculture. The

importance of this issue has been repeatedly underscored in relevant APEC fora and leaders' meetings as follows:

- Respond to key objectives of 2012 APEC Economic Leaders' Declaration, in which APEC leaders determined to "reduce post-harvest losses along the entire food supply chain..."
- Address a critical issue indicated in the 2012 Kazan Declaration on APEC Food Security, which highlights the significance of "decrease post-harvest losses" in order to "achieve sustainable agricultural growth."
- Represent continuous efforts and concrete actions to respond to the 2010 Niigata Declaration on APEC Food Security, in which it stressed: "We encourage APEC economies to cooperate in reducing food losses in all stages in the value chain from production and processing to distribution and consumption by sharing best practices."
- Support ATCWG's Medium-Term Workplan (2010-2015), indicating that the goal of food security can be achieved by adopting "post-harvest interventions to ensure food security."
- Relate to the APEC Policy Partnership on Food Security (PPFS)'s Action Plan for 2012-2013 of developing a road map to achieve the long-term goal of APEC food system by 2020,

**3. Objectives:** Describe the 2-3 key objectives of the project. (e.g. to... create and implement a framework...; ensure participants will be able to...; enhance understanding...; influence policies...; build interest...; promote communications... etc.)

- (1) To identify key issues on reducing post-harvest losses and costs of the entire food supply chain and improving food safety and quality in the APEC region;
- (2) To seek best practices in private and public sectors on reducing post-harvest losses and costs, to enhance the role of public-private partnership (PPP) along the entire food supply chain, and to reinforce policy coordination among APEC economies; and
- (3) To search and identify practical solutions, to enhance capacity-building on reducing food losses and costs as well as improving food safety and quality, and to develop a consolidated methodology of APEC food losses assessment, thus contributing to safeguarding food security in the APEC region.

**4. Multi-year approach:** Describe why this project would be best done as a multi-year project. Does the scope of the project reflect how the different stages of the project build on each other to achieve a specific goal? Why are APEC Multi-Year Project funds the best source of funding for this project?

Given the complexity of post-harvest food losses issues, the encompassing objectives of this project cannot be achieved in a single year and need to be implemented step by step with a multi-year approach, to ensure the success of the project. Since the realization of this project is hinged on different but closely related themes in each phase, this project not only needs collective cooperation and extensive teamwork among different APEC fora, including ATCWG, PPFS, FSCF, and ABAC, but also require valuable inputs from other regional and international stakeholders as well as from public and private sectors, to cover the diverse aspects of food losses issues. In this project, the close interconnections and continuous coordination of five-year activities need mutual supports of outputs in each phase. A multi-year approach allows cohesive execution and ensures the continuity of project, so it can generate workable and concrete deliverables.

APEC Multi-Year Project funds is the best source of funding since it allows the project to be executed in a gradual and continuous fashion and makes the project's implementation feasible. The fund promotes wide-spectrum collaboration among APEC fora and contributes to the incorporation of inputs from other non-APEC stakeholders and members in private sector. With the support of this far-sighted approach, this project will generate more brainstorming and long-term effective solutions on reducing food losses and costs.

**5. Linkages:** Describe the involvement of other APEC fora and other organizations, and linkages with previous APEC work.

- **Other fora:** What role will they play in the planning and implementation of the project? How will they share in the benefits?

This project will have a close collaboration with various APEC fora, mainly including ATCWG, PPFS, and ABAC. These fora will involve in every stage of the project planning and implementation. First, the project proposal will be fully circulated in these fora and has taken their advices into account. Second, the members of FPN will come from or be recommended by these fora. These fora will participate in the project implementation from initial design to final policy recommendations, by timely providing directions to the

project. Third, the members of these fora will be invited to participate in all activities of this project, including as trainers in workshops/training programs.

All of these fora will share significant benefits from this project. This project will make enormous contribution to achieving the agenda of ATCWG, specifically regarding its objectives of improving agricultural productivity and capacity through agricultural technical cooperation between APEC members, and respond to food security challenges, charged by APEC Leaders. Additionally, this project helps to achieve numerous priorities of PPFS listed in its first meeting in 2012, including post-harvest losses, food quality and safety, food waste, etc. Through introducing advanced technologies and better food managements along the food supply chain, this project will reduce food losses and enhance food quality and safety in the APEC region, so as to contribute to safeguarding food security in the APEC region

- **Non-APEC stakeholders: What role will external stakeholders play in the planning and implementation of the project? How will they share in the benefits?**

Non-APEC stakeholders from both public and private sectors, such as International Rice Research Institute (IRRI) and Save Food, will be involved in the organization and participation of seminars and workshops/training programs in accordance with APEC's non-member participation guidelines. Private sectors, such as Sustainable Restaurant Association (SRA), will be invited to share their successful stories in reduction of food losses and costs. Relevant research institutes or centers, such as International Livestock Research Institute (ILRI), WorldFish, International Center for Tropical Agriculture (CIAT), and International Union of Food Science and Technology (IUFOST), can help to recommend experts/trainers, share information, and offer timely suggestions.

- **Previous work: How does this project build on, rather than duplicate, previous or ongoing initiatives in APEC or other organizations?**

This project builds on the findings of previous projects and further explores the new frontier. Distinguished from the preceding projects concentrating on the application of new technologies to improve and harmonize training standards in post-harvest quality of fruit and vegetables (ATCWG 02/2007, ATC 02/2008A), the project expands the focus on crops (i.e., rice, wheat, corn) and other food. In addition to augmenting the findings of previous projects focusing on postharvest technologies for enhancing quality management of food quality and safety (ATC 03/2008Arev2, ATC02/2004), the project aims to promote the role of public-private partnership in reducing post-harvest losses along the entire food supply chain, including crop harvesting, handling, packaging, storage, processing, transport, marketing, food preparation to the dining table, by introducing best practices from private sector and government's policy guidance in reducing food losses.

#### **6. Methodology: How do you plan to implement the project? In this section, address briefly:**

- **Preliminary workplan: a summary of key activities and deliverables over the course of the multi-year project, including:**

This project will be implemented by the FPN and the organizing committee of Chinese Taipei, and will involve all APEC member economies.

- **Estimated timelines and dates for each**

| Key Activities   | Time          | Place              | Explanatory Notes  |
|--|---------------|--------------------|--|
| <b>Phase I: Preparation, Research, and Identification of Key Issues</b>  | <b>2013</b>   |                    |  |
| Establish the Focal Point Network (FPN) in ATCWG meeting   | Apr, 2013     | Jakarta, Indonesia | The members of FPN will come from members of ATCWG and PPFS. FPN will be responsible for nominating trainers, providing guidance and comments on the deliverables.   |
| Study the current status and key issues of post-harvest food losses in the APEC region   | May-Oct, 2013 |                    | The study will be conducted by interested economies, composed of experts and scholar from both developed and developing APEC economies.  |
| Hold an FPN meeting, a workshop and a seminar with a wide spectrum of cross-cutting issues on reducing food losses, especially on food crops | Aug, 2013     | Chinese Taipei     | <ul style="list-style-type: none"> <li>• Seminar &amp; workshop: to be attended by the delegates of public and private sectors.</li> <li>• FPN meeting: to discuss the follow-up actions.</li> <li>• Build a methodology of food losses assessment on food crops.</li> </ul> |

|   |                  |                |   |
|---|------------------|----------------|---|
| <b>Phase II: Investigation of Food Losses</b>   | <b>2014-2016</b> |                |   |
| – Theme: fruit and vegetables<br>Hold a seminar, a workshop and the second FPN meeting          | Apr-Aug, 2014    | 3 economies    | 3 voluntary economies will jointly hold a seminar, a workshop, and a FPN meeting, respectively, in their economies in each year (2014-2016).<br><ul style="list-style-type: none"> <li>• Seminar &amp; workshop: to be attended by the delegates of public and private sectors from all APEC economies.</li> <li>• FPN meeting: to review the previous outputs and discuss the follow-up actions.</li> <li>• Build a methodology of food losses assessment and compile best practices on the theme in each year.</li> </ul> |
| – Theme: fishery and livestock products<br>Hold a seminar, a workshop and the third FPN meeting | Apr-Aug, 2015    |                |   |
| – Theme: restaurants and supermarkets<br>Hold a seminar, a workshop and the fourth FPN meeting  | Apr-Aug, 2016    |                |   |
| <b>Phase III: Consolidation</b>   | <b>2017</b>      |                |   |
| Cooperate with member economies to develop their policy framework on food losses assessment     | Mar-Aug, 2017    |                | Based on the results regarding the policy framework, FPN will draft the final methodology of APEC food losses assessment .  |
| Hold the high-level meeting on reducing food losses and costs in the APEC region.               | Aug, 2017        | Chinese Taipei | Conclude the final finding and action plans; endorse the draft of policy recommendations, and the methodology of APEC food losses assessment.   |

**Next Steps:** APEC ATCWG, PPFS, and FSCF will be the major fora to continue utilizing the outcomes of the project after the completion of the project.

○ **Beneficiaries and how the results or benefits will be shared or communicated with them**

Beneficiaries of the project include government agencies, private sector, particularly the food producers, distributors, agro-technology companies, NGOs, research institutes, regional and international organizations, etc. Relevant stakeholders along the food supply chain are primary beneficiaries of this project, because they can benefit by lowering food losses and costs through adopting relevant best practices and strengthening their capacity building. The indirect but most significant beneficiaries are people in the APEC region, since this project will make enormous contribution to APEC food security.

All APEC economies will be invited to participate in various seminars and workshops/training programs for exchanging their experiences and improving their capacity in reduction of food losses and costs along the entire food supply chain. Relevant members in ABAC, NGOs, business community, and other stakeholders will also be invited to contribute their insights. The project will share all information, research findings, and policy suggestions with APEC economies as well as Asia-Pacific Food Security Information Platform (APIP). Meanwhile, the project will keep close connections with the APEC Secretariat and relevant APEC fora, such as ATCWG, FSCF, PPFS, HLPDBA, as well as related regional and international organizations and members in private sector.

- **Monitoring and Evaluation:** How will you know if the project is on track (monitoring) and successful in meeting its objectives (evaluation)? What information will you collect (e.g. stakeholder feedback, participant stats, policy changes adopted, etc.) and how will you collect it (e.g., meetings, surveys, interviews, peer review, records review)?

To measure the achievements of the project, the organizing committee of the project will conduct a yearly report at the end of each year. In addition to collecting comments and suggestions from all meeting participants of APEC members, relevant APEC fora, and stakeholders, the report will also be examined and reviewed by the FPN in the following annual meeting for providing guidance and research direction in the next steps.

Besides, this project will form a monitoring committee for project monitoring and assessment. The members of this monitoring committee will come from some members of FPN to track the progress of the project on a seasonal basis. An evaluation committee will also be formed in the end of the project to evaluate and examine the final outcomes of the project and appraise whether the project meets its objectives.

**Budget:** Complete the budget below, with the total amounts over the full period of the project (3 to 5 years). Please consult the *Guidebook on APEC Projects* for eligible expenses and the *APEC Multi-Year Project Criteria*. Please add any calculations, notes or justifications that might help reviewers better understand the project's budget.



| <u>USD</u>  | APEC Funding  | Co-Funding   |
|---|---|--|
| Direct Labour   |   | <i>Researchers:</i><br>1 person * 60 months*400= 24,000<br>2 persons * 60 months*800= 96,000<br>2 persons * 50 months*700= 70,000<br>3 persons * 50 months* 400= 60,000<br><i>Consultants:</i><br>2 persons * 60 months*500= 60,000<br><b>Total: 310,000</b> |
| Speaker's honorarium<br>(government officials ineligible) | <ul style="list-style-type: none"> <li>2013 Seminar: 1,000*10 experts /speakers=10,000<br/>-Workshop/training program 1,000*2 trainers=2,000</li> <li>2014 Seminar: 1,000*6 experts/speakers= 6,000<br/>-Workshop/training program 1,000*2 trainers=2,000</li> <li>2015 Seminar: 1,000*6 experts= 6,000<br/>-Workshop/training program 1,000*2 trainer=2,000</li> <li>2016 Seminar: 1,000*6 experts= 6,000<br/>-Workshop/training program 1,000*2 trainer=2,000</li> <li>2017 High Level Meeting :1,000*10 experts /speakers=10,000</li> </ul> <b>Total: 46,000</b> | Local Speakers:<br>8 persons * 5 years *140 =5,600<br><br><b>Total: 5,600</b>  |
| Travel (Speakers, Experts, Researchers)                   | <ul style="list-style-type: none"> <li>2013 Seminar: Airfares: 10 speakers+ 2 trainers =12* 3,650=43,800</li> <li>2014 Seminar: Airfares: 6 speakers + 2 trainer =8*3,650 = 29,200</li> <li>2015 Seminar: Airfares: 6 speakers + 2 trainers =8*3,650 = 29,200</li> <li>2016 Seminar: Airfares: 6 speakers + 2 trainers =8*3,650 = 29,200</li> <li>2017 High Level Meeting: Airfares: 10 speakers/experts* 3,650=36,500</li> </ul> <b>Total: 167,900</b>   |  |
| Travel (Participants)                                     | 22 participants from the 11 travel eligible economies to attend seminar (2013 & 2017)<br>Airfares= 22 participants *2,000*2=88,000<br>Per diem=282*6*22*2=74,448<br>11 participants from the 11 travel eligible economies to attend seminar and training program (2014, 2015 & 2016)= 11 participants *2,000*3=66,000<br>Per diem= 282*6*11*3= 55,836<br><b>Total: 284,284</b>  |  |
| Project Event costs                                       |   | Seminar (2013 & 2017) 4 days :<br>63,000 *2=126,000<br>Seminar+ training program (2014, 2015 & 2016)<br>4 days= 45000*3 = 135,000 <b>Total: 261,000</b>  |
| Publication/distribution                                  |   | Meeting Documents: 40 *300 *5= 60,000<br><b>Total: 60,000</b>  |
| <b>Total</b>  | 498,184   | 636,600  |



Policy Partnership on Food Security Meeting

APEC Multi-Year Project

***Strengthening Public-Private Partnership  
to Reduce Food Losses in the Supply  
Chain***

(2013-2017)

Chinese Taipei

January 25-26, 2013

Jakarta, Indonesia

## Outline

1. Significance of Food Losses in Global Food Security
2. Importance of Post-Harvest Losses in APEC
3. Objectives of Chinese Taipei's Multi-Year Project
4. Methodology
5. Linkages of APEC fora and Other Organizations
6. Targeted Beneficiaries
7. Monitoring and Evaluation
8. Conclusion

## 1. Significance of Food Losses in Global Food Security

- Growing population raises food demand
  - ◆ The world's population is expected to increase to 9.1 billion people by 2050, and it will require a 70% increase in food production and 50% rise in agricultural investment (FAO).
- Food Losses become a pressing issue
  - ◆ One-third of the edible parts of food for human consumption gets lost or wasted globally, about 1.3 billion ton per year (*Global Food Losses and Food Waste, FAO 2011*).
  - ◆ Post-harvest losses in fruit and vegetables can be as high as 50% or more.

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## 2. Importance of Post-Harvest Losses in APEC (1/4)

- APEC's key role in the global population and agricultural production
  - ◆ APEC accounts for 41% of world population
  - ◆ APEC accounts for 53% of global cereal production
  - ◆ APEC accounts for 70% of fish production

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## 2. Importance of Post-Harvest Losses in APEC (2/4)

- APEC Food Losses are severe and compelling
  - ◆ According to UN Industrial Development Organization (UNIDO), post-harvest losses in Asia alone are estimated at 30% of global food production annually, valued at \$5 billion.
  - ◆ Food waste in APEC developed economies is also critical. For instance, according to **Natural Resources Defense Council's (NRDC)** estimate, in one case, 40% of food is thrown away, equivalent to \$165 billion each year.

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## 2. Importance of Post-Harvest Losses in APEC (3/4)

- APEC's Emphasis on Post-Harvest Losses
  - ◆ 2012 APEC Economic Leaders' Declaration, in which APEC leaders determined to “**reduce post-harvest losses along the entire food supply chain...**”
  - ◆ 2012 Kazan Declaration on APEC Food Security, which highlights the significance of “**decrease post-harvest losses**” in order to “achieve sustainable agricultural growth.”
  - ◆ 2010 Niigata Declaration on APEC Food Security, in which it stressed: “We encourage APEC economies to cooperate in **reducing food losses in all stages in the value chain** from production and processing to distribution and consumption by sharing best practices.”

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## 2. Importance of Post-Harvest Losses in APEC (4/4)

### ●APEC's Emphasis on Post-Harvest Losses

◆ Support ATCWG's Medium-Term Workplan (2010-2015), indicating that the goal of food security can be achieved by adopting “**post-harvest** interventions to ensure food security.”

◆ Relate to the APEC Policy Partnership on Food Security (PPFS)'s Action Plan for 2012-2013 of developing a road map to achieve the long-term goal of **APEC food system** by 2020.

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## 3. Objectives of Chinese Taipei's Multi-Year Project (1/2)

●To identify key issues on reducing post-harvest losses and costs of the entire food supply chain and improving food safety and quality in the APEC region.

●To seek best practices in private and public sectors on reducing post-harvest losses and costs, to enhance the role of public-private partnership (PPP) along the entire food supply chain, and to reinforce policy coordination among APEC economies.

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### 3. Objectives of Chinese Taipei's Multi-Year Project (2/2)

- To search and identify practical solutions, to enhance capacity-building on reducing food losses and costs as well as improving food safety and quality, and to develop a consolidated methodology of APEC food losses assessment, thus contributing to safeguarding food security in the APEC region.

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### 4. Methodology (1/4)

- The project aims to address post-harvest losses in all stages of the entire food supply chain in the APEC region by **strengthening cooperation of public and private sectors**.
- Phase 1 (2013): Preparation, Research, Identification of Key Issues and Sharing Best Practices
  - ◆ Special focus on crops
- Phase 2 (2014-2016): Investigation of Food Losses, Sharing Best Practices and Capacity Building
  - ◆ Special focus on fruit and vegetables in 2014
  - ◆ Special focus on fishery and livestock products in 2015
  - ◆ Special focus on restaurants and supermarkets in 2016
- Phase 3 (2017): Consolidation
  - ◆ Conclude policy recommendations, the methodology of APEC food losses assessment, and a compilation of best practices

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## 4. Methodology (2/4)

### ● Phase 1 (2013): Preparation, Research, Identification of Key Issues and Sharing Best Practices

| Key Activities   | Time          | Place              | Explanatory Notes  |
|--|---------------|--------------------|--|
| Establish the in <b>Focal Point Network (FPN)</b> ATCWG meeting  | Apr, 2013     | Jakarta, Indonesia | The members of FPN will come from members of ATCWG and PPFS. FPN will be responsible for nominating trainers, providing guidance and comments on the deliverables.   |
| Study the current status and key issues of post-harvest food losses in the APEC region   | May-Oct, 2013 |                    | The study will be conducted by interested economies, composed of experts and scholar from both developed and developing APEC economies.  |
| Hold an FPN meeting, a workshop and a seminar with a wide spectrum of cross-cutting issues on reducing food losses, especially on food crops | Aug, 2013     | Chinese Taipei     | <ul style="list-style-type: none"> <li>Seminar &amp; workshop: to be attended by the delegates of public and private sectors.</li> <li>FPN meeting: to discuss the follow-up actions.</li> <li>Build a methodology of food losses assessment on food crops.</li> <li>Sharing best practices in food crops</li> </ul> |

## 4. Methodology (3/4)

### ● Phase 2 (2014-2016): Investigation of Food Losses, Sharing Best Practices and Capacity Building

| Key Activities   | Time          | Place       | Explanatory Notes  |
|--|---------------|-------------|--|
| – Theme: <b>fruit and vegetables</b><br>Hold a seminar, a workshop and the second FPN meeting          | Apr-Aug, 2014 | 3 Economies | 3 voluntary economies will jointly hold a seminar, a workshop, and a FPN meeting, respectively, in their economies in each year (2014-2016).<br><br>•Seminar & workshop: to be attended by the delegates of public and private sectors from all APEC economies.<br>•FPN meeting: to review the previous outputs and discuss the follow-up actions. |
| – Theme: <b>fishery and livestock products</b><br>Hold a seminar, a workshop and the third FPN meeting | Apr-Aug, 2015 |             |  |
| – Theme: <b>restaurants and supermarkets</b><br>Hold a seminar, a workshop and the fourth FPN meeting  | Apr-Aug, 2016 |             |  |

## 4. Methodology (4/4)

### ● Phase 3 (2017): Consolidation

| Key Activities  | Time          | Place          | Explanatory Notes   |
|---|---------------|----------------|---|
| Cooperate with member economies to develop their policy framework on food losses assessment | Mar-Aug, 2017 |                | Based on the results regarding the policy framework, FPN will draft the final methodology of APEC food losses assessment .  |
| Hold the <b>high-level meeting</b> on reducing food losses and costs in the APEC region.    | Aug, 2017     | Chinese Taipei | Conclude the final finding and action plans; endorse the draft of policy recommendations, a compilation of best practices and the methodology of APEC food losses assessment. |

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## 5. Linkages of APEC Fora and Other International Organizations (1/2)

- Close collaboration with APEC fora, including **ATCWG, PPFS, and ABAC**
  - The project proposal will be fully circulated in these fora and has taken their advices into account.
  - The members of FPN will come from or be recommended by members of these fora. These fora will participate in the project implementation from initial design to final policy recommendations, by timely providing directions to the project.
  - The members of these fora will be invited to participate in all activities of this project, including as trainers in workshops/training programs.
- This project helps to **address key priorities of PPFS** listed in its first meeting in 2012, including post-harvest losses, food quality and safety, food waste, etc.

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## 5. Linkages of APEC Fora and Other International Organizations (2/2)

- Non-APEC stakeholders from both public and private sectors will be involved in the organization and participation of seminars and workshops/training programs in accordance with APEC's non-member participation guidelines.
  - ◆ International Rice Research Institute (IRRI)
  - ◆ Sustainable Restaurant Association (SRA)
  - ◆ International Livestock Research Institute (ILRI)
  - ◆ World Fish
  - ◆ International Center for Tropical Agriculture (CIAT)
  - ◆ International Union of Food Science and Technology (IUFoST)
- All these institutes and research centers can help to recommend experts/trainers, share information, and offer timely suggestions

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## 6. Targeted Beneficiaries (1/1)

- Targeted Beneficiaries
  - ◆ Stakeholders along the food supply chain are primary beneficiaries of this project, and benefited by lowering food losses and costs through adopting relevant best practices and building their capacity.
    - Public Sector: government agencies
    - Private Sector: food producers, distributors, agro-technology companies, NGOs, research institutes, regional and international organizations, etc.
  - ◆ The indirect but most significant beneficiaries: The people in the APEC region, since this project enhances APEC food security.

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## 7. Monitoring and Evaluation

- The organizing committee of the project will conduct a yearly report at the end of each year.
- The FPN will examine and review the yearly report in the following annual meeting for providing guidance and research direction in the next steps.
- A monitoring committee of the project will track the progress of the project on a seasonal basis.
- An evaluation committee of the project will also be formed in the end of the project to evaluate and examine the final outcomes of the project and appraise whether the project meets its objectives

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## 8. Conclusion

- The multi-year project has been endorsed by the ATCWG and there are 12 co-sponsors from member economies.
- Seeking for the endorsement from PPFS to be the associated forum of the multi-year project.

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**Thank You for Attention!**

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