



**Asia-Pacific
Economic Cooperation**

2014/SOM1/IPEG/007

Agenda Item: 2c

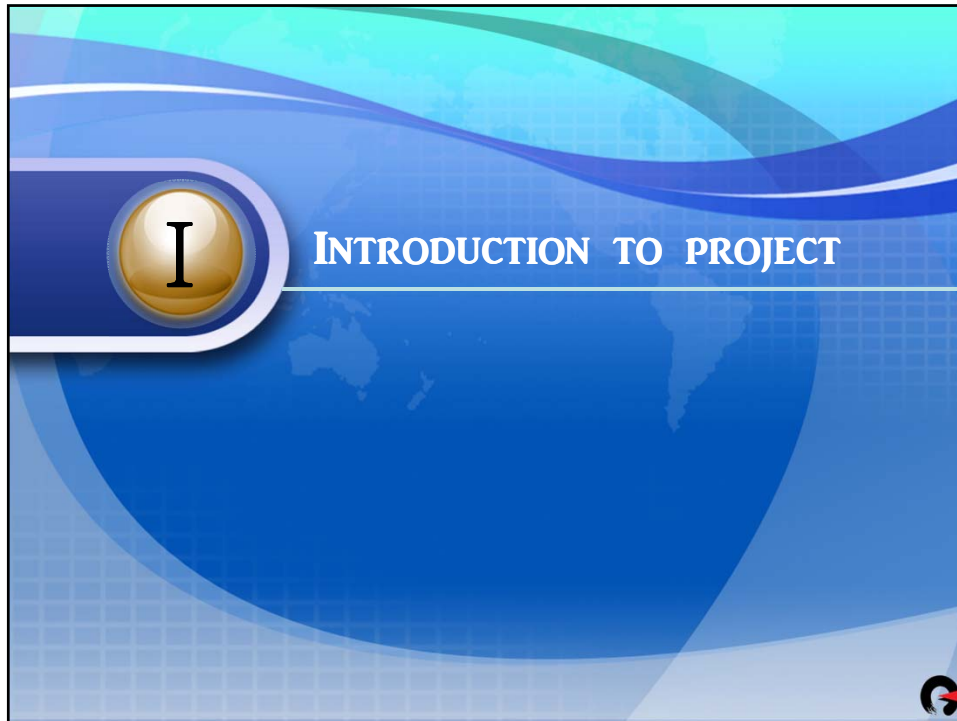
Appropriate Technology Development

Purpose: Information
Submitted by: Korea



**38th Intellectual Property Rights Experts'
Group Meeting
Ningbo, China
17-18 February 2014**





INTRODUCTION

Process for Creating AT

Identify Local Needs

Prior Art Search

Development


Localization & DB

- Local difficulties
- Environment, way of life and culture

- Search related prior art in patent DB
- Identify optimal technology for resolving problems

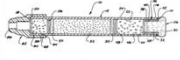
- Develop AT
- Local tests
- Adapt to local environments



- Distribute improved technology or prototype models
- Establish AT DB



United States Patent 6,993,874
 Yano et al. Patent Number: 6,993,874
 Date of Patent: Feb. 24, 2015

ABSTRACT
 A water distribution system for providing water to a community. The system includes a water source, a pump, a distribution network, and a water storage tank. The system is designed to be simple, reliable, and easy to maintain. The system includes a water source, a pump, a distribution network, and a water storage tank. The system is designed to be simple, reliable, and easy to maintain.



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Identifying local needs

Papua New Guinea	Philippines
<p>Appropriate and simple water harvesting system</p> 	<p>Appropriate technology to increase number of blossoming trees</p> 
<p>Appropriate and simple rural electrification</p> 	<p>Pest control and disease prevention technology</p> 
	<p>Proficient oil extractor machine</p> 

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II PROJECT PROCESS

Study Visit: Pinu, Papua New Guinea

Study Visit: Pinu, Papua New Guinea (May 18-26, 2013)



Basic research

- Water resources and irrigation system
- Basic residential environment
- Agriculture, form and size of local farms



Interviews

- Identify needs and affordable prices
- Identify electricity usage



Market research

- Identify available materials
- Identify capabilities of local engineers

Study Visit: Pinu, Papua New Guinea

Study Visit: Pinu, Papua New Guinea (May 18-26, 2013)



Local partner

- Identify the availability and level of technology
- Discuss the possibility of collaborative work



IPO of PNG

- Patents and licensing issues
- Exchange of views

Study Visit: Anao, Philippines

Study Visit: Anao, Philippines (6.9-6.15, 2013)



Basic research

- Examine the status of local infrastructure



Existing extractor

- Identify existing problems
- Low yield and usability



Market research

- Identify available materials
- Identify capabilities of local engineers

Study Visit: Anao, Philippines

Study Visit: Anao, Philippines (6.9-6.15, 2013)



Visit local organizations

- Anao women's association
- Identify status of secondary product creation



Interviews

- Identify local people's demands / requirements



Visit technical institute

- Explore possibilities for collaboration



Local government


- Discuss product concepts
- Identify government demands

III RESULTS OF THE PROJECT

RESULT OF THE PROJECT

PAPUA NEW GUINEA

Improved Rope Pump



Procedure

- Willingness of local partner
- Priorities of local people
- MOU with IPOPNG and NARI
- Co-development
- Localize the technology


Results

- Production of a bicycle rope pump idealized for shifting cultivation

RESULT OF THE PROJECT

The Philippines

Improved Oil Extractor




2013. 12. 06

Procedure

- Aim to increase income of local
- Efficient oil extractor for community use
- MOU with DTI Tarlac, Research institute, and local government
- Co-development
- Localize the technology

Results

- Produce small oil extractor with improved energy efficiency and transfer rate



THANK YOU

