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KOICA's Efforts in Building Capacity for Local Adaptation Planning

UN Adaptation Forum
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KOICA Korea International Cooperation Agency
WORLD FRIENDS KOREA

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I. Introduction of Green ODA in KOICA

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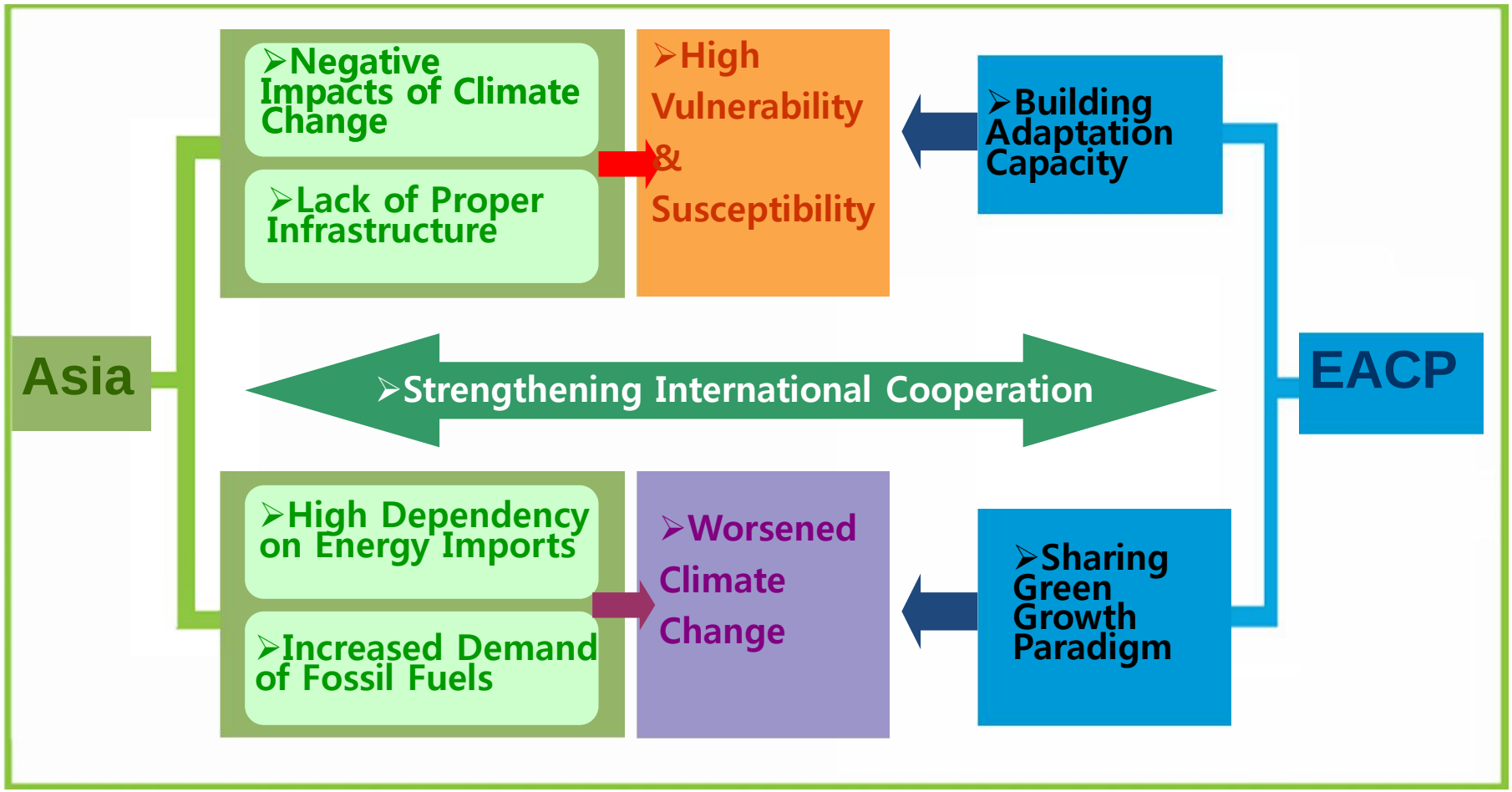
Asia and climate change (EACP)



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1. Program Outline

- ✓ First proposed at **the July 2008** G8 summit by the Republic of Korea
- ✓ Provide a total of USD 200 M for five years (‘08-’12)

2. Five priority Areas

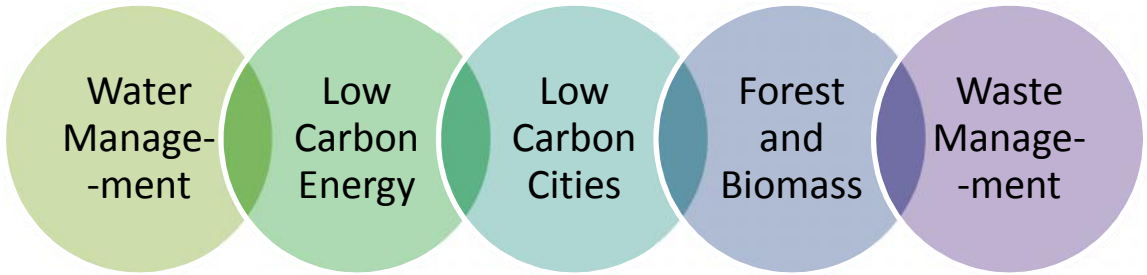
MITIGATION

- **Lack** of Infrastructure, capacity, System/Policy
- **Renewable / Alternative Energy**
  Low carbon system / policy

ADAPTATION

- **Absence** of climate change managing ability
  Inadequate climate Change forecasting capability
- **Pollution/Disaster forecasting capability**
  Disaster recovery and Water resource expansion, Disease control

5 PRIORITIES



East Asia Climate Partnership

3. EACP Partners

● *Target Recipient Countries*

✓31 Countries chosen according to climate change risks and relations with Korea

✓ 20 Bilateral projects in 10 Asian countries*

➢ * *Azerbaijan, Bangladesh, Cambodia, Fiji, Indonesia, Mongolia, Philippines, Tajikistan, Sri Lanka, Vietnam*

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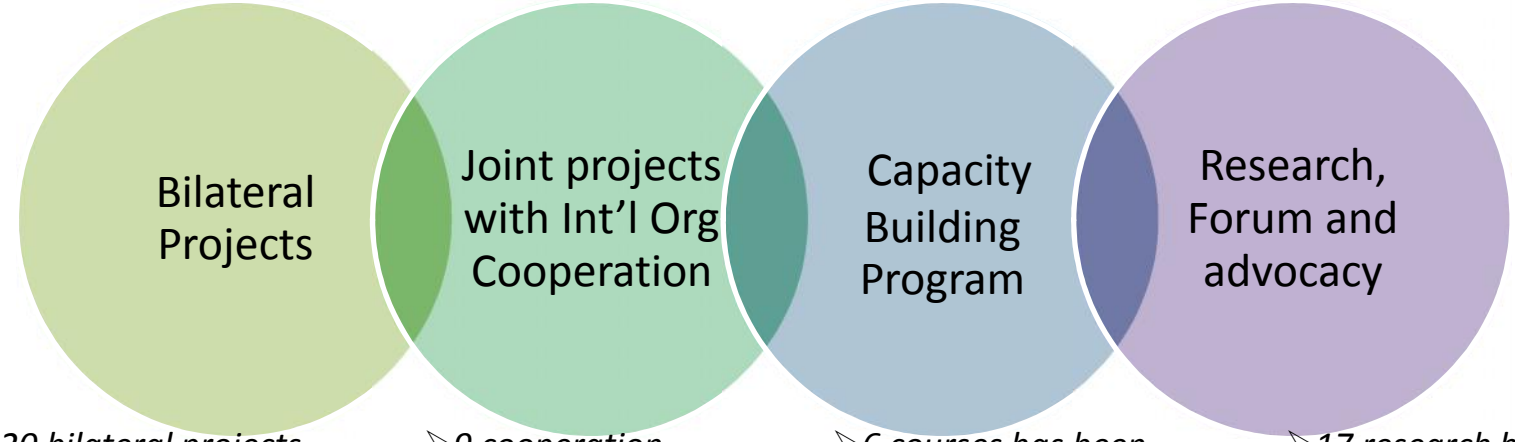
4. EACP Programs

- *" All Packaged Partnerships " – with 4 major different types*



- *20 bilateral projects on five priority fields in 10 partner countries*
- *3 water landmark project in Philippine, Mongolia, Azerbaijan*

- *9 cooperation projects with 7 international organizations**
- ** ADB, UNESCAP, UNEP, UNIDO, WHO, IFC, IMO and etc.*

- *6 courses has been finished and 3 courses are planed to held.*
- *Financial support for GGGI in its launch during 2010-2012*

- *17 research has done or ongoing and 2 researches are expected to be done more.*
- *East ASIA Climate Forum in2009 (enlarged into Global Green Growth Forum in 2011)*

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II. KOICA' Efforts for Local Capacity Building in response to Climate change Adaptation

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Challenge and barriers to CC Adaptation in locality

- Limited budget and resources available for adaptation to CC in local community and government
- Low awareness of local government and residents about the hazards and impacts posed by climate changes
- Lack of knowledge to adaptation science and technology and disaster reduction response system
- No universal alternative due to different climate risks and different policy options by regions
- High interrelationship between CC change and development including affected livelihood and undermined sustainable growth

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Case study on capacity building in Climate Change Adaptation planning

KOICA presents adaptation projects in agriculture sector and disaster response in the aspect of capacity building of local planning and share lessons and insights

- Proposed Guimaras Disaster Risk Reduction and Management (DRRM) Framework for Guimaras Province

- Solar Powered Irrigation Pump and Solar Home System at six rural areas in Bangladesh

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Case study (1) – DRR Management in Local province

- **Project :** Proposed Guimaras Disaster Risk Reduction and Management(DRRM) Framework for Guimaras Province (funded by "Yeosu Project", implemented by KOICA)
- **Objective :** to draft policy framework which will be subsequently developed into a Guimaras DRRM Plan, to be approved by the Governor and adopted by legislative body of Guimaras
- **Methods**
  - Science-based research and review on Guimaras disaster risk
  - Province-wide survey on awareness on disaster risk
  - In accordance with the Philippines National law(2010)
  - Findings on existing Guimaras Disaster Management Plan
- **Partners :**

EXPO 2012 YEOSU KOREA

PROVINCE OF GUIMARAS 1992

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Adverse Impacts of Hazards and Climate Change

- Sea level rise
- Strengthened and frequent typhoons
- Water/drought or flooding
- Health concern/water and vector-borne diseases
- Changes in ecosystem
- Pollution / oil spill

➢ **Requiring a Disaster Risk Reduction and Management to address vulnerablity and potential hazards in Guimaras**

➢Categorizing Project sites by types and vulnerability

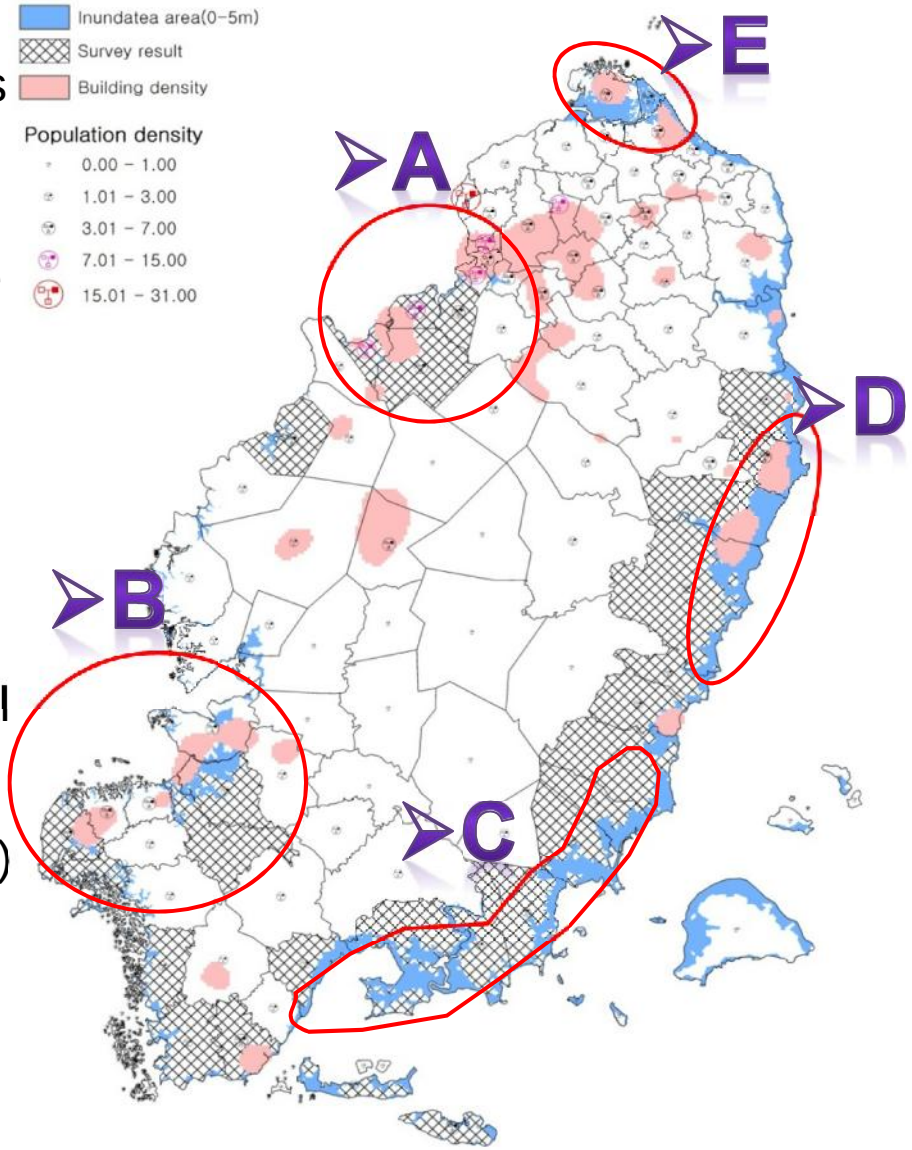
➢**A** : High population density, high buildings density, and disaster-prone area (Jordan, Buenavista)

➢**B** : High buildings density, disaster-prone area, low-lying coastal area (Nueva Valencia)

➢**C** : Low-lying area, low population (buildings) density, tsunami Inundation Expectation Area in Coast, Island (Nueva Valencia, Sibunag)

➢**D** : High building density, low-lying coastal area (San Lorenzo)

➢**E** : Expected inundation area (Buenavista)



Site Survey on Disaster Prone Area

➢Coastal village is vulnerable to sea level rise

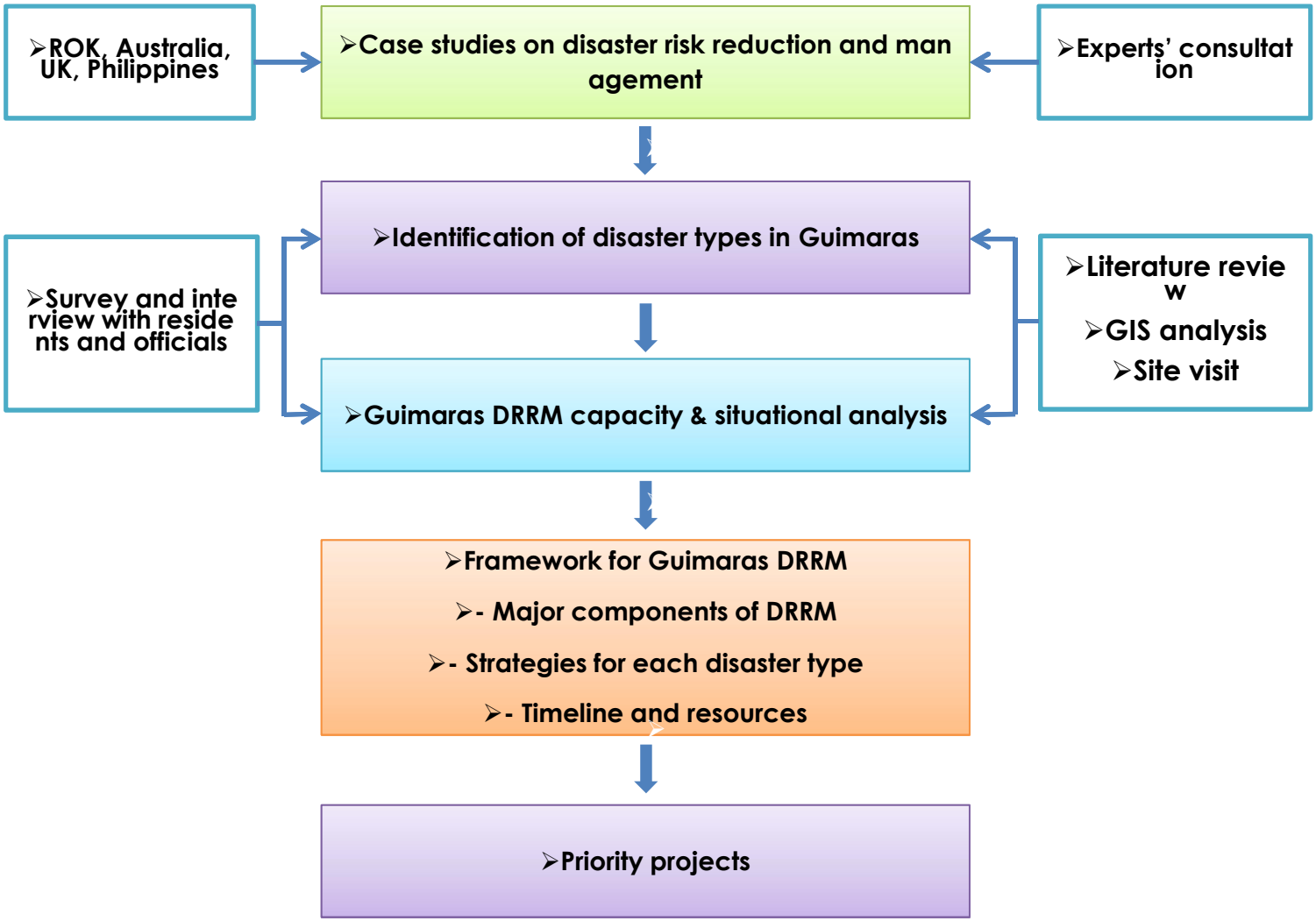
➢Destruction of ecosystem by oil spill accident

➢ Serious coastal erosion in tourism site

➢Landslide prone area

➢*Photos : KMI Project Team*

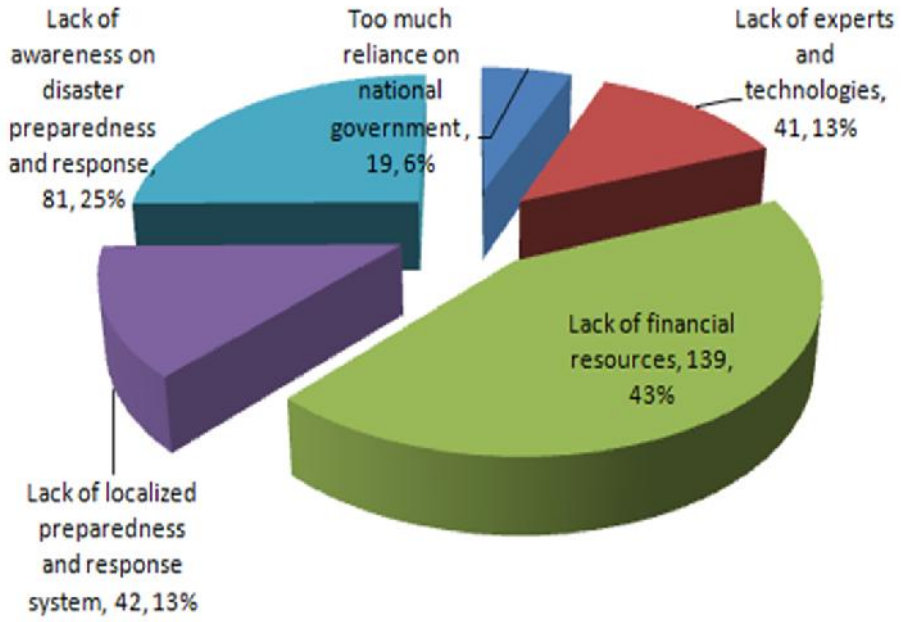
Work Flow chart for the DRR project



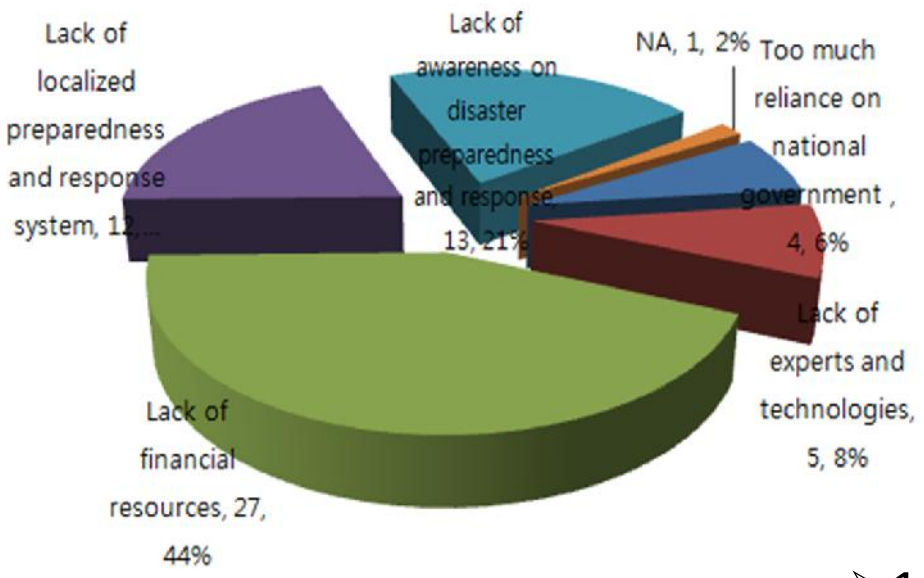
Obstacles in Local Disaster Risk Reduction(DRR)

- On March 2011, 5 municipalities(325 people) in the Guimaras Province(residents and officials) were surveyed
- The survey shows that major constraints to prepare disaster response is lack of **financial resources(44-45%)**, Lack of **awareness** on disaster preparedness**(21%-25%),** Lack of **response system(13%-19%),** lack of **technologies and experts(8-13%)**

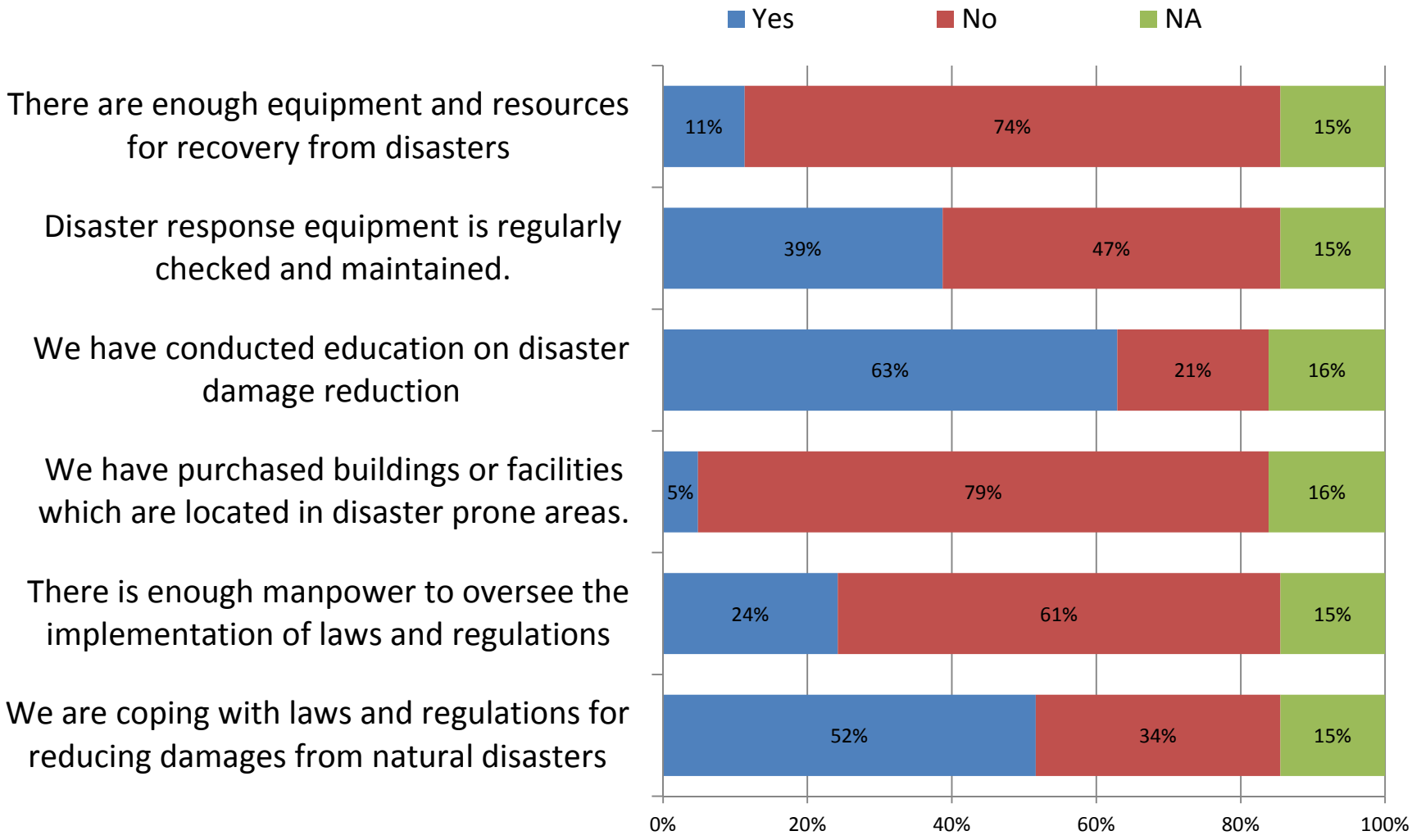
➢Residents



➢Officials



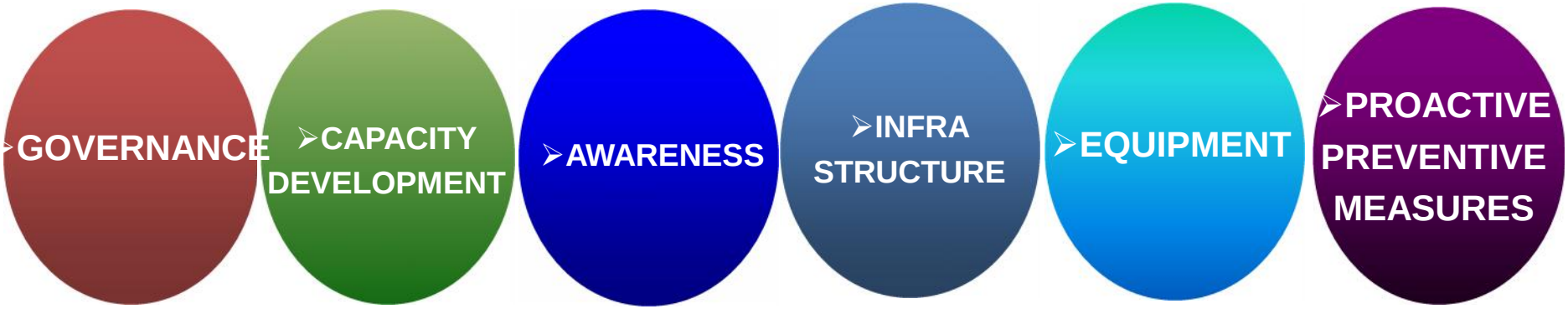
➢ Outcome of DRR Awarness Issues



➢Gimaras DRR Framework

➢A disaster-prepared and resilient province with a progressive economy in the principles of sustainable development

➢6 Strategies



Strategy and Action for DRR (1)

strategy	measures and actions required
Governance	**Policy/Ordinance/Regulation** -designation of the Natural Hazard Prone Areas (NHPA) -enacting ordinances and policy reform **Finance** -utilization of "Calamity Fund" or new "calamity response fund" -mobilizing funding from domestic/international agencies **Institutional Arrangements** -Mainstreaming of PDRRMO(Province Disaster Reduction Risk Management Office)
Capacity Building	**Education/Training** -Training on emergency management **(**disaster response) responders/rescuers/relief/medics -PDRRMC, MDRRMC and DRRMC and staff -Evacuation procedure & Data management system **Technical cooperation** -Exchange programme for experts -Joint implementation of DRRM projects
Awareness	**Publications :** Flyers and Posters, Manuals **Meetings/Seminars/Workshops** -Regular PDRRMC Meetings,Emergency Meetings,Public Hearings **Campaigns :** Drills and Exercises, Awareness Month/Day Celebration **Media Relations :** Press release, TV/Radio announcement **Strengthening P-LINKKK :** Modernizing equipment etc.

➢ Strategy and Action for DRR (2)

strategy	measures and actions required
Infrastruture & Equipment	**Hard structures** -drainage/sewage system - seawalls and dikes/breakwater, improvement/rehabilitation of roads **Evacuation center** designation/identification/construction of center construction of evacuation roads **Vehicle & Emergency Kits**
Awareness	**Pre-disaster phase** Risk assessment and vulnerability analysis Monitoring of hazard-prone areas Strengthening of Response Teams at the Barangay Level Early warning system **During disaster phase** Damage assessment and needs analysis (DANA) Search and rescue operations Relief and evacuation **Post-disaster phase** Water, Sanitation and Hygiene (WASH), Psychosocial, Nutrition and Health Repair/rehabilitation of Infrastructure

➢ Review and Recommendations

- **The coordinated body such as DRR office/center** should be established first and foremost, by taking initiative of top leader of the local government because CC affects all level of development in the province
- **The comprehensive DRR framework** should be made based **on scientific survey and analysis and through participatory consultation** with local experts, residents and government officials.
- The survey found **awareness building in government and local residents** should be applied as a critical component in planning adaptation measures as well as the technical solutions and response system in local area
- Given the reality of shortage of financial resources in most local governments, **categorizing regions by vulnerability and developing response measures must be listed up by priority** to make sure effective allocation of limited resources

Case study (2) –Water & Solar Hybrid in Bangladesh

- **Period** : 2010-2012
- **Budget** : USD 2,500,000
- **Project sites** : 7 remote rural villages in Bangladesh

- **Objective** : to enhance the access to electricity and irrigated water in the rural area and contribute to poverty reduction and climate change adaption

- **Project content**

  20 units of Solar Irrigation pumping System and solar home system for 1,250 households and capacity building

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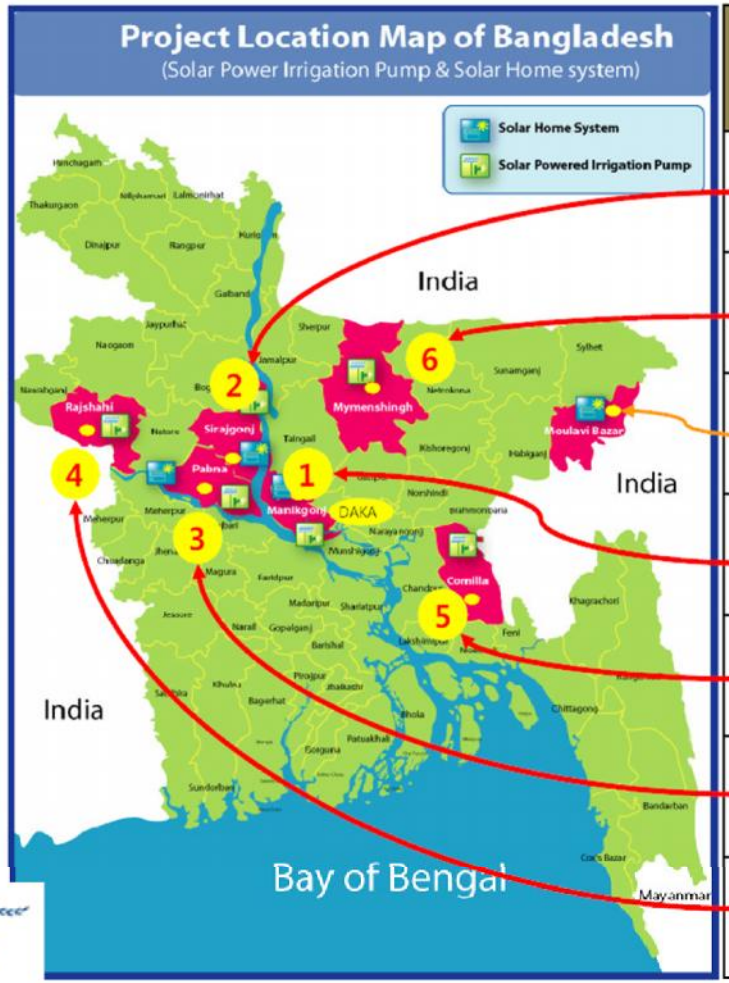
Selection of 6 village site in Bangladesh

- Seven local area were chosen based on irrigation water shortage, level of access of electricity, technical viability and impact of climate change



Location	PV Installation Order	Pump Installation Order
Sirajganj	2	4
Mymensingh_1	6	2
Moulvi Bazar		
Manikganj	1	3
Comilla_1	5	1
Pabna_2	3	5
Rajshahi	4	6

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Status quo in local community

- Increasing lack of irrigated water because of climate change and underwater depletion leading to productivity reduction and poverty aggravation

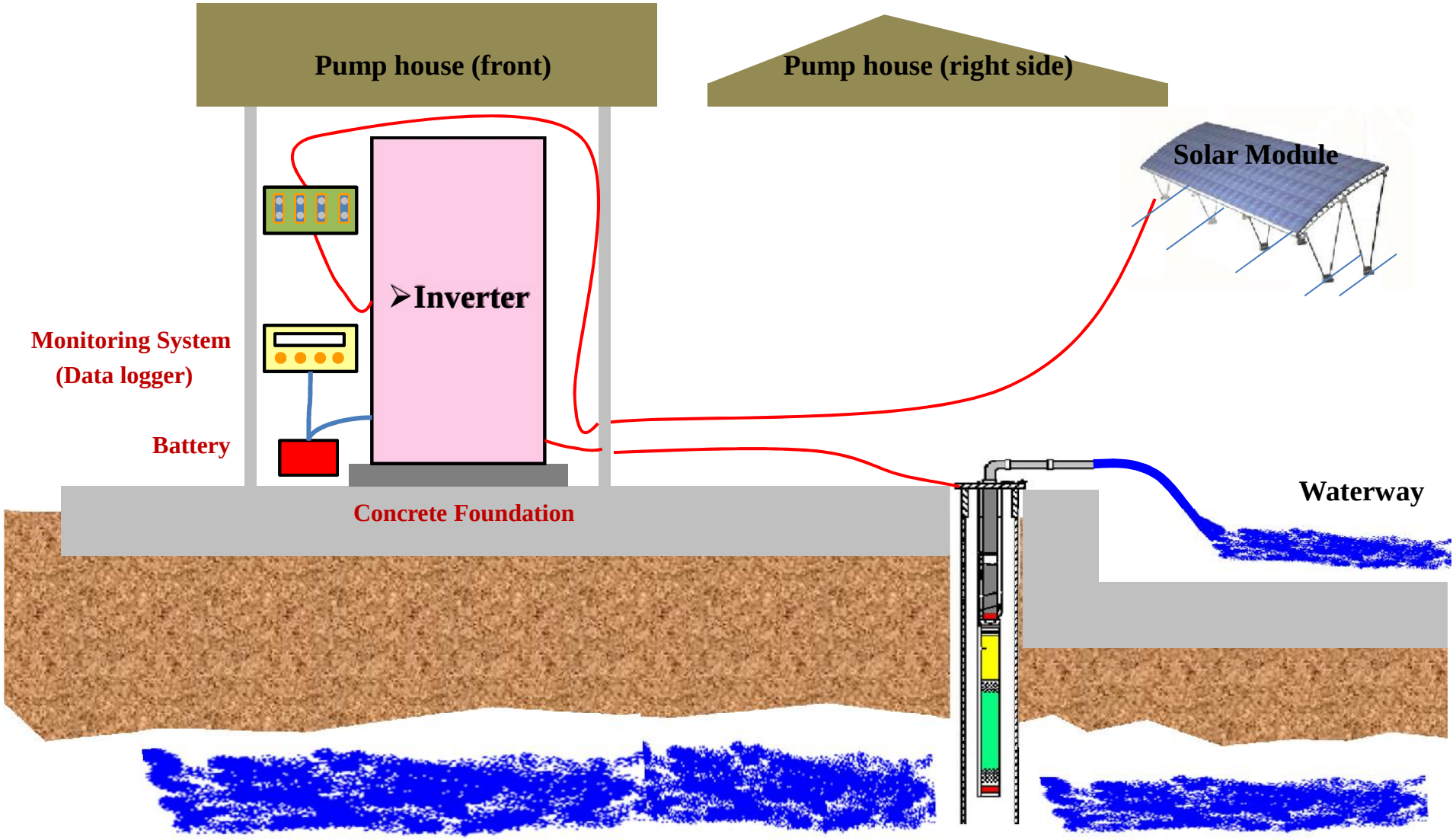
- Low access of and unaffordable electricity in off-grid rural area, resulting in low productivity and quality of life

- Unstable and un-ecofriendly way of electrification and high operation cost of gasoline turbine(technical options required)

➢Local Vulnerability of climate change adaption and threatened livelihood

➢ Hindered achievement of Sustainable Development and Green Growth

Layout of Underwater Pumping System



Transformed Situation after the Project

<Before>

<After>

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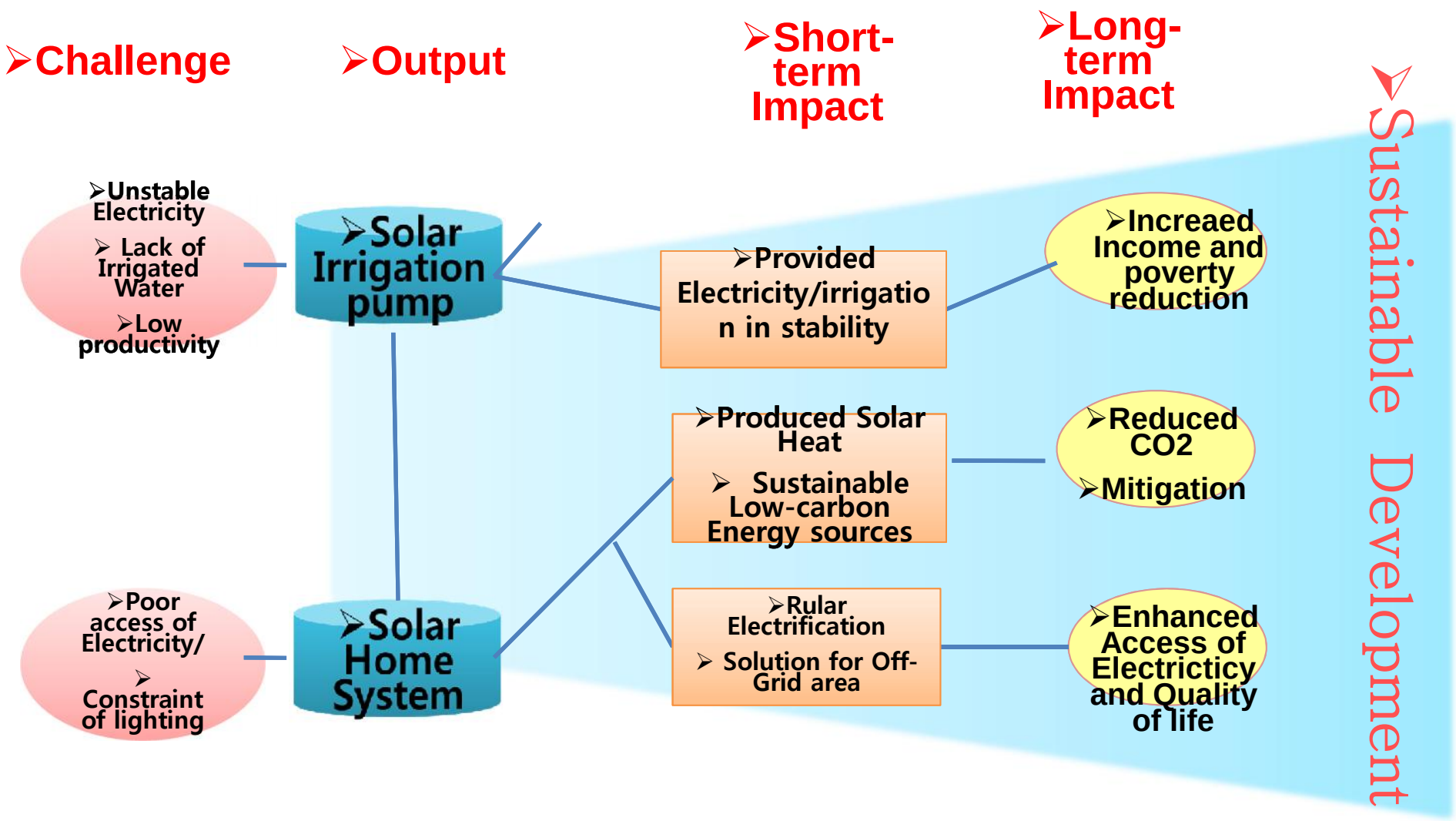
Project Background and Impacts



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Observations and Insight

- In off-grid regions or remote isolated rural area, **renewable energies combined projects** such as solar irrigation system can significantly strengthen local capacities in response to climate change adaptation and secure livelihood and wellness of the local people

- The successful innovation should be reflected **in planning of local government framework,** which can serve as a foundation to attract subsequent commitments and investments for sustainable development

- **Maintenance by local community** can contribute to not only assure sustainable operation but to **green job creation** by training unemployed youth on management skills. So **community-based management approach** is reflected in joint consultation between local community and donor

Conclusion and Recommendation

- **Adaptation to CC** is **not a individual issue** but the **matter of survival and participatory process** led by all stakeholders building awareness together and discovering common actions to respond to potential vulnerability and exposure to risks

- Donors or central governments may play a vital role in building capacity at an initial stage by **supporting financial aid, technical cooperation and scientific survey**.

- However, it totally depends subsequently on the **local ownership and sustained efforts of management** of knowledge, information and risks and resources by each community and local government in order to remain intact in the changing climate

- Finally, There is **no one-size-fits-all solution**. Each local government should identify their own climate risks and devise their own practical long-term actions, which ultimately should **integrate CC scheme into local government policy and institutional planning at all levels**

Think Globally, Act Locally

- Thank You -

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