Panel 3F: Water, Food, Energy and Climate: The importance of integrated policy and programming approaches

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The Private Infrastructure Development Group (PIDG)

• PIDG is an innovative infrastructure development and finance organisation funded by the governments of the UK, the Netherlands, Switzerland, Australia, Sweden and Germany and the IFC

• Our purpose is to combat poverty in the poorest and most fragile countries through pioneering infrastructure to help economies grow and change people’s lives

• Operating collaboratively across all stages of an infrastructure project’s life-cycle, PIDG delivers pioneering infrastructure through three business lines that deploy a unique set of capabilities:
  • Upstream Technical Assistance – DevCo and TAF
  • Developer – Investor (early stage project development) – InfraCos
  • Credit Solutions – Emerging Africa Infrastructure Fund and GuarantCo

• InfraCo Asia and GuarantCo operate within the Asian region, supported by DevCo and TAF

• We invest in energy projects, agri-infrastructure and water (as well as transport and communications)
PIDG projects in the nexus of water, food and energy in Asia

**WATER**
- Run of river hydropower (Nepal, Vietnam)
- Water supply projects (Vietnam)

**ENERGY**
- Solar (Vietnam, Bangladesh, India, Philippines)
- Wind (Pakistan, Philippines)

**FOOD**
- Agri-processing (Myanmar, Cambodia)

**Hydroponics** (India)

**Biomass** (Sri Lanka, Myanmar); **Biogas** (Thailand); **Waste to energy** (Sri Lanka, Philippines)
How PIDG approaches the challenge of integration

• Prioritises countries where the need for infrastructure is greatest
• Seeks low-carbon solutions
• Undertakes on-grid and off-grid energy projects to reach underserved (especially rural) areas
• Applies environmental and social safeguards to mitigate negative impacts e.g.
  • Run of river hydropower avoiding physical/economic displacement of farmers
  • Solar farms on unproductive land or with crops beneath the panels
  • Change in land use - eg for biomass - adds to rather than displaces cash crops
• Stress-tests the resilience of projects in the face of climate change e.g.
  • Sensitivity analysis for effects of changed rainfall on hydropower
• Supports innovation in technology, business models and financial structures
Example 1: Biomass Group, Sri Lanka

- Gliricidia trees planted as fences by smallholder farmers
- Branches cut for biomass chips and pellets
- Trees remain for carbon sequestration
- Leaves used for compost, organic pesticide
- Database of smallholder farmers enables links to market for other crops, increasing income for farmers
Example 2: Solar nano-grids for rural electrification, Bangladesh

- Small-scale microgrids
- Can power irrigation equipment for farmers
- Increasing productivity
- Replacing expensive and high-carbon diesel
- Increasing income for farmers
Thank you