

Presentation ADB OPERATIONS IN SOUTH ASIA

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MIO OKA

Environment, Natural Resources, and Agriculture Division South Asia Department (SAER)

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SOUTH ASIA: Growing Region

Growth Rate (%)	2018	2019	2020
		(forecast)	(forecast)
Developing Asia	5.9	5.7	5.6
excluding NIEs	6.4	6.0	6.0
People's Republic of			
China	6.6	6.2	6.0
Indonesia	5.2	5.1	5.2
Philippines	6.2	6.0	6.2
Thailand	4.1	3.0	3.2
Pakistan	5.5	3.3	2.8
Uzbekistan	5.1	5.8	6.0
South Asia			
India	6.8	6.5	7.2
Bangladesh	7.9	8.1	8.0
Nepal	6.7	7.1	6.3
Sri Lanka	3.2	2.6	3.5



SOUTH ASIA: Opportunities & Issues

- Water and food security are pressing issues by 2050 in Asia, 100% more food must be produced with 30% less water.
- Pockets of poverty exists despite growth.
- Large client demand for rural infrastructure (irrigation and rural roads).
- Clients' appetite for <u>new technologies and climate resistance</u> in design.
- Growing private sector but Inadequate <u>public funds for operation and maintenance.</u>

OUR RESPONSE: Focus on 3 Subsectors

WATER Our Core Subsector

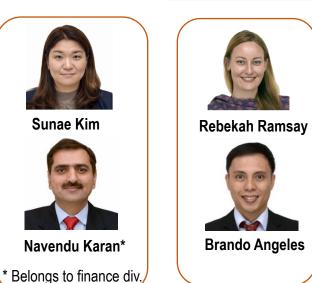


RURAL ROADS Rapidly growing



AGRI-BUSINESS New, but high demand





Resident Missions



Zahir **Ahmad** (BAN)



Rajesh Yadav (IND)



Krishan Rautela (IND)



Raghav Naduvinamani (IND)



Arun Rana (NEP)



Kamal **Dahayanake** (SRI)

IRRIGATION: Issues and Opportunities

- Open canals and drainage.
 - →Not efficient water use.More crop per drop needed.
- Small contracts with land acquisition.
 - → Project implementation delays.
- Insufficient funds for O&M.
 - → Farmers did not pay for water. Sustainability always questioned.



IRRIGATION: Our Response

IND: Madhya Pradesh Irrigation Efficiency Improvement Project

(\$375 million loan in May 2018)

- Introduction of Pressurized Irrigation System
 - → Increased irrigated area from 58,000 ha to 125,000 ha with the same amount of water and with better irrigation service delivery.
- Introduction of Design-Build-Operate contracts
 - → Appointed 2 contractors to design, operate and maintain the system for 5 years. Water user fee will be collected.





AGRIBUSINESS: Issues and Opportunities

Many trials and errors

→Pilots were implemented, but government did not have confidence to scale up due to failures.

ADB new in the 'agribusiness'

- → Needed concrete examples to demonstrate ADB's approach.
- Technologies available & private sector entry to agriculture.
 - → New thoughts are brought into the 'agribusiness'. But Farmers still rely on traditional ways to sell their products and did not benefit from economic growth.







AGRIBUSINESS: Our Response

IND: AgTech Application in Agriculture in Andhra Pradesh

(\$2.5 million, 2020)

- Successfully demonstrate 'doubling farmers income' through improving market information to farmers.
- AP was chosen, high growth rate of horticulture (17%), ranked 1st for the ease of doing business index (2017), leading state for the AgTech driven innovations.

Partners Agreement (Public-Private-Producer)

- 1. Dep. Horticulture
- Farmer Producer Organizations
- 3. Research Inst./Universities/ Private partners
 - Processing/buying
 - Input
 - Weather info provider
 - Water DB management
 - Cloud service provider
 - Satellite image provider

Integrated Digital Value Chain Platform

- Site-soil characteristics (physical, chemical, land)
- Weather (historic, real-time, forecast)
- Water (groundwater, surface, soil moisture)
- Dynamic advisories using AI

Market Intelligence: Price, logistics, quality

Farmer Producer Organizations

Advisories

- Market requirement
- Sowing time
- Harvest time
- Irrigation requirement
- Fertigation
- Risk
- Negotiation/facilitation

Business Plan & Financing Adoption of Best Practices High-quality and safer food

Farmer mobilizer/facilitator organize farmers, collect information on farmers and provide advisories and build capacity of farmers.