

Digital Connectivity to Rural and Remote Areas

Public Private Partnership Projects by KT



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Limitations & Challenges

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E-Commerce project



Limitation & Challenges for Rural areas

What are the issues?



Specific limitation/challenges to connect rural and remote areas

- Geographic access (distance, terrain, poor roads, mine, etc.)
- Shortage of Power supply (electricity)
- Low geographic density of target population
- Low potential ARPU, High installation cost, High operation & maintenance cost
- Lack of technical personnel/ICT literacy
- Lack of investment/funding (public and private)



Digital Divide

- Income/Jobs
- Education
- Health
- Gender
- Migration...

	Urban	Rural	Discrepancy
Revenue per square mile	US\$248,000	US\$262	X1,000
Capex per subscriber			x4



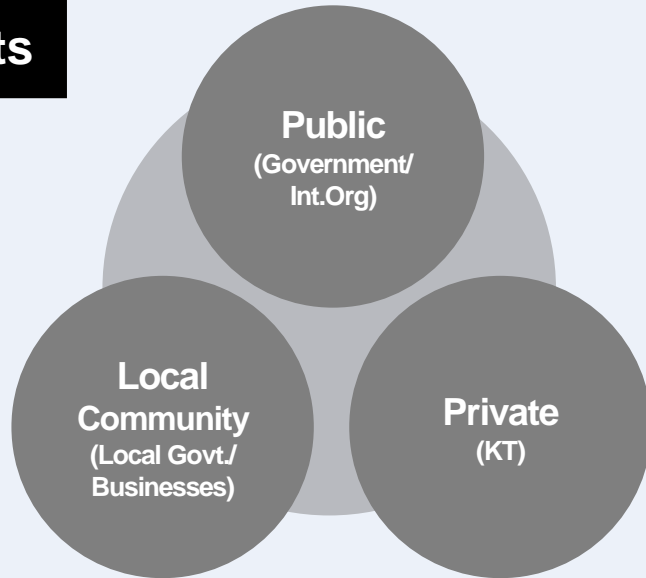
Source: IEEE ComSoc Technology News, KT consultation cases in Africa (2015), ITU (2017)



Public Private Partnership Model

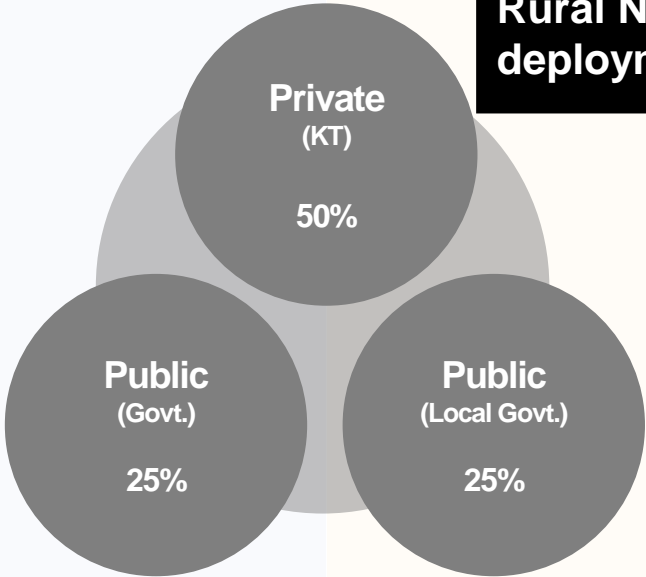
to maximize efficiency & effectiveness of projects

CSR Projects



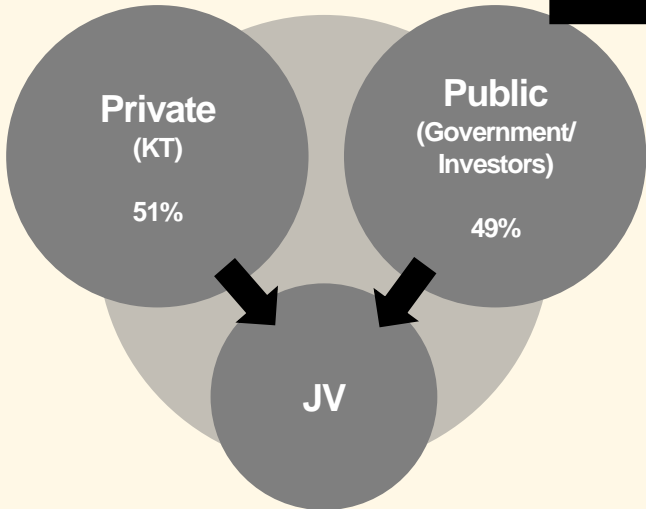
***To provide coverage for rural & remote areas**

Rural Network Infrastructure deployment in Korea



***To provide coverage for rural areas of Korea**

Business Projects



***Population coverage of 95% in Rwanda including rural areas**

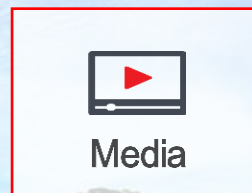
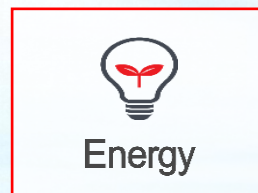


GiGA Island project to Bridge Gaps

Our Corporate Social Responsibility (CSR) Projects

GiGA Island projects (2014 -)

: Connecting remote and isolated areas





GiGA Island projects to Bridge Gaps

Our Corporate Social Responsibility (CSR) Projects

Connecting the unconnected 1% of Korea

: To connect geographically and socially isolated areas of Korea



GiGA Island (Baekryeong island)

March 2015

Safety: Disaster resistant network, Ship monitoring, Smart farm solutions, etc.



GiGA Island (Gyodong Island)

March 2017

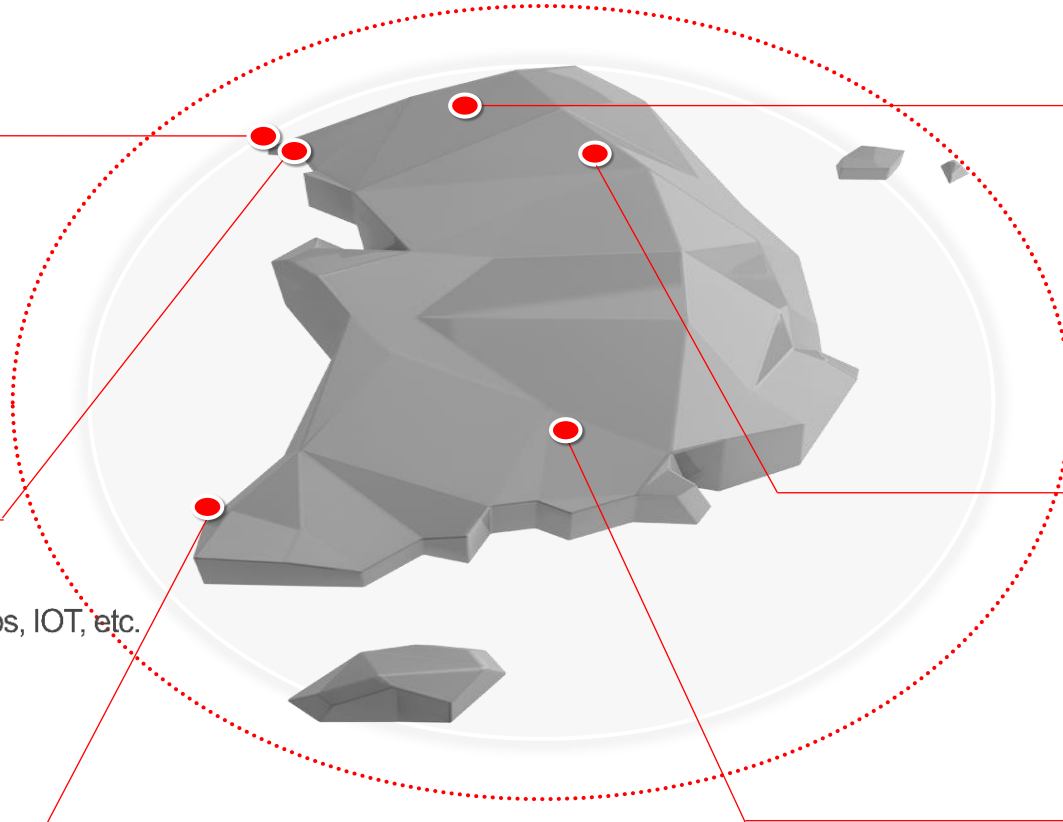
Tourism: Tourism promotion platform/apps, IOT, etc.



GiGA Island (Imja Island)

October 2014

Agriculture/culture: Smart farm, ICT school, etc.



GiGA School (DMZ Daesongdong)

November 2014

Education: ICT education system and solutions, etc.



GiGA Village (Pyeongchang)

December 2017

Agriculture/Culture: Animal detection system energy solutions, etc.



GIGA Vaillage (Cheonghakdong)

July 2015

Distance learning, drone for safety, etc.



Baekryeong Island



Jirisan Mountain

- Network infrastructure
- IOT beacon to provide local information to visitors
- Distance learning system and other solutions for schools
- Safety Drone for hazardous areas
- ICT education center
- Healthcare equipment (Mobile Urine Analyzer, daily checkup app for senior local residents)
- **Public partners**
 - Ministry of Agriculture, Food and Rural Affairs
 - Hadong district government office

Cheonghak: Traditional village







GiGA Island project in Bangladesh

Moheshkhali Island project

Moheshkhali, The most isolated island in Bangladesh

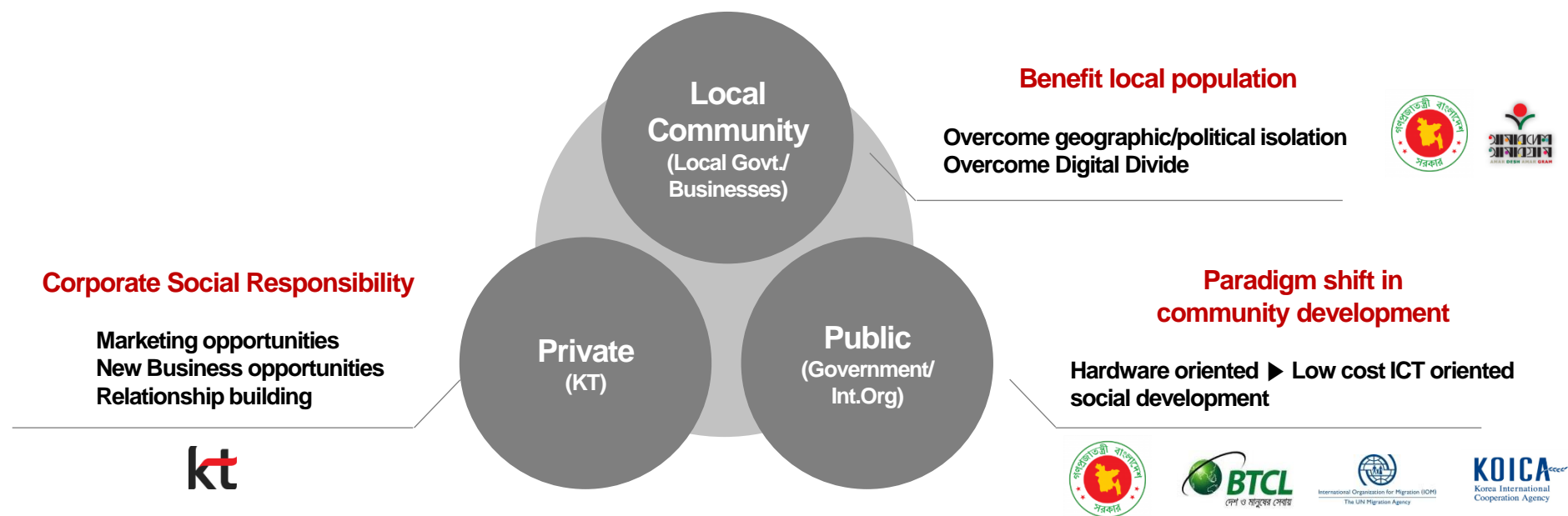


- ▶ Located South Eastern part of Bangladesh within Cox's Bazar region.
Residents: 300,000
- ▶ **400km** away from Dhaka
Social/Economically isolated area.
Minimum supply of electricity, water, education, health facilities and services
- ▶ 40% of residents under poverty level
62% of residents involved in agriculture sector
- ▶ Increasing number of Illegal migration to nearby countries such as Malaysia



GiGA Island project in Bangladesh

Public Private Partnership Model





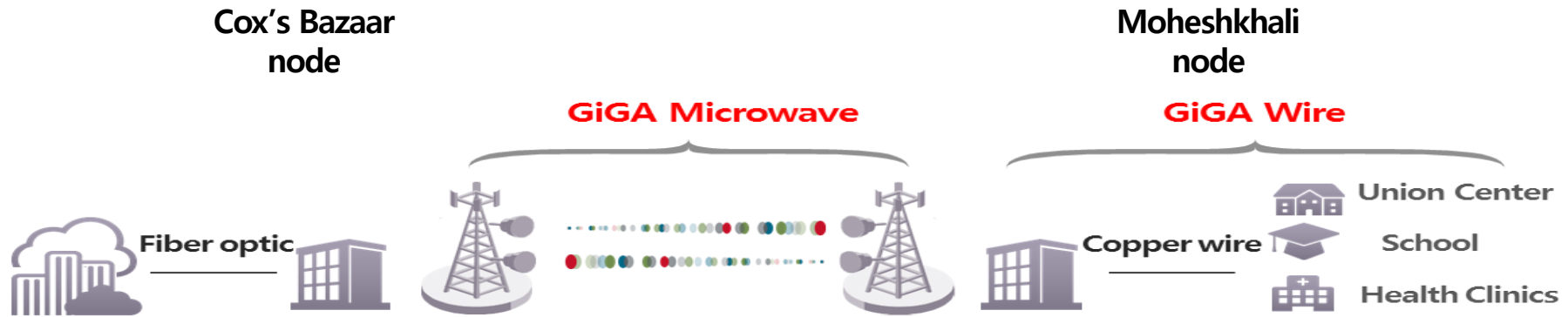
GiGA Island project in Bangladesh

Network infrastructure

Network infrastructure Installation

: GiGA Microwave: connecting the island with mainland (Maximum 500mbps)

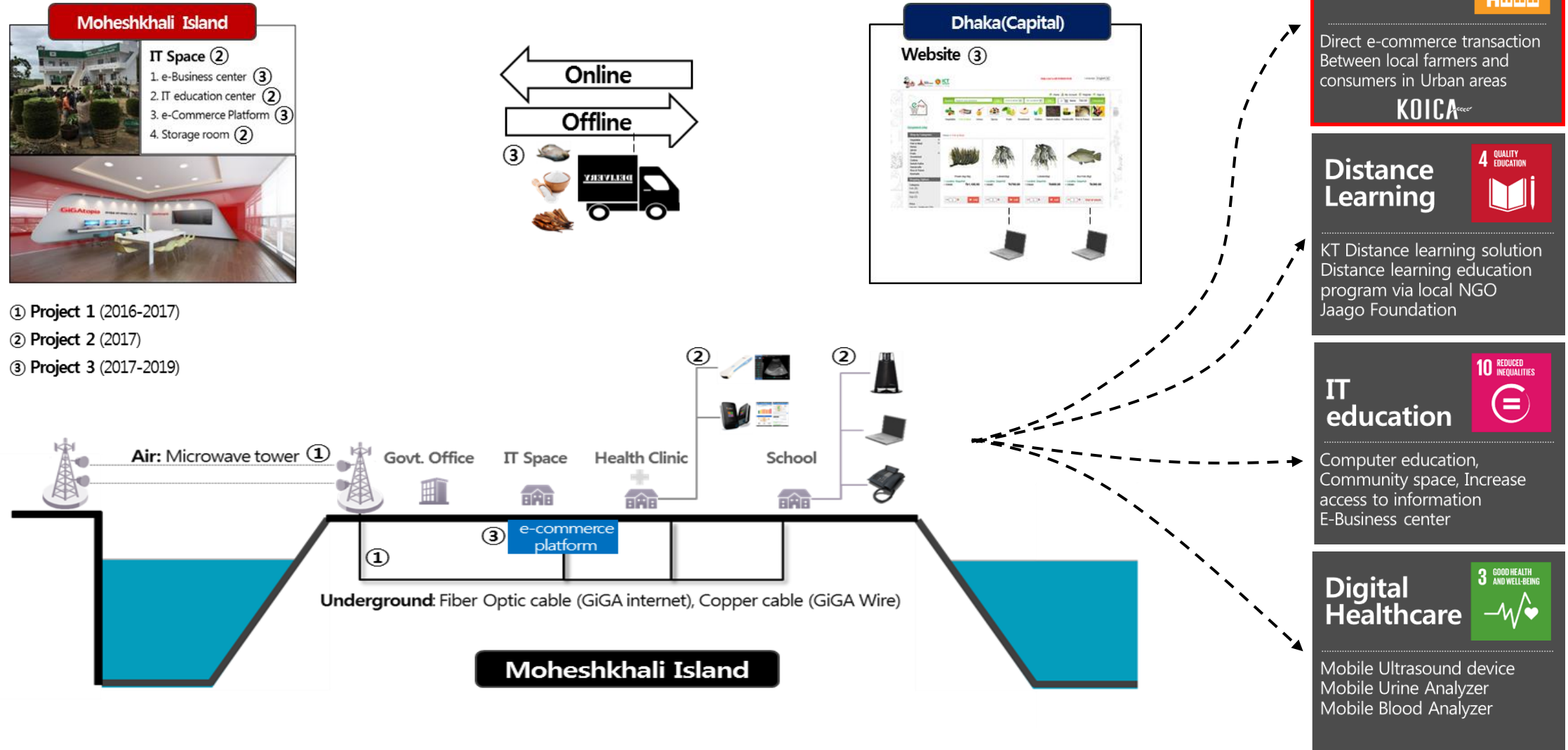
GiGA Wire: G.hn technology that Uses existing copperline network on the island (Maximum 100mbps)





GiGA Island project in Bangladesh

Overview to the project



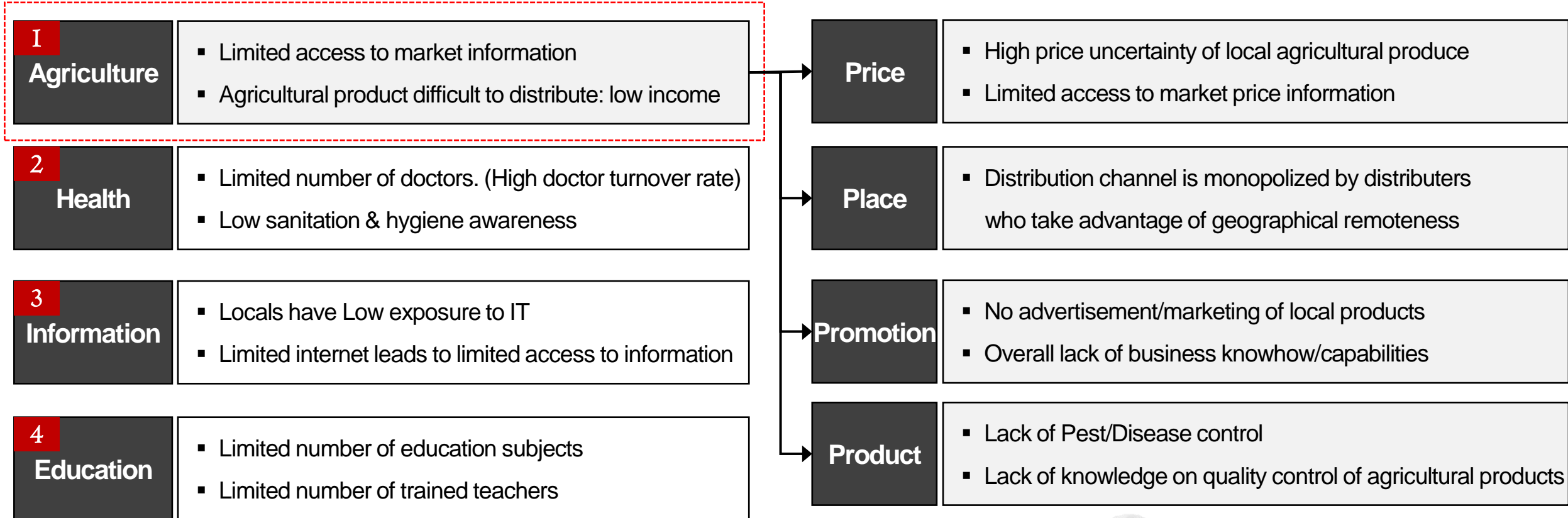


GiGA Island project in Bangladesh

e-commerce project

High commission paid to middleman

: Low income to Moheshkhali island farmers



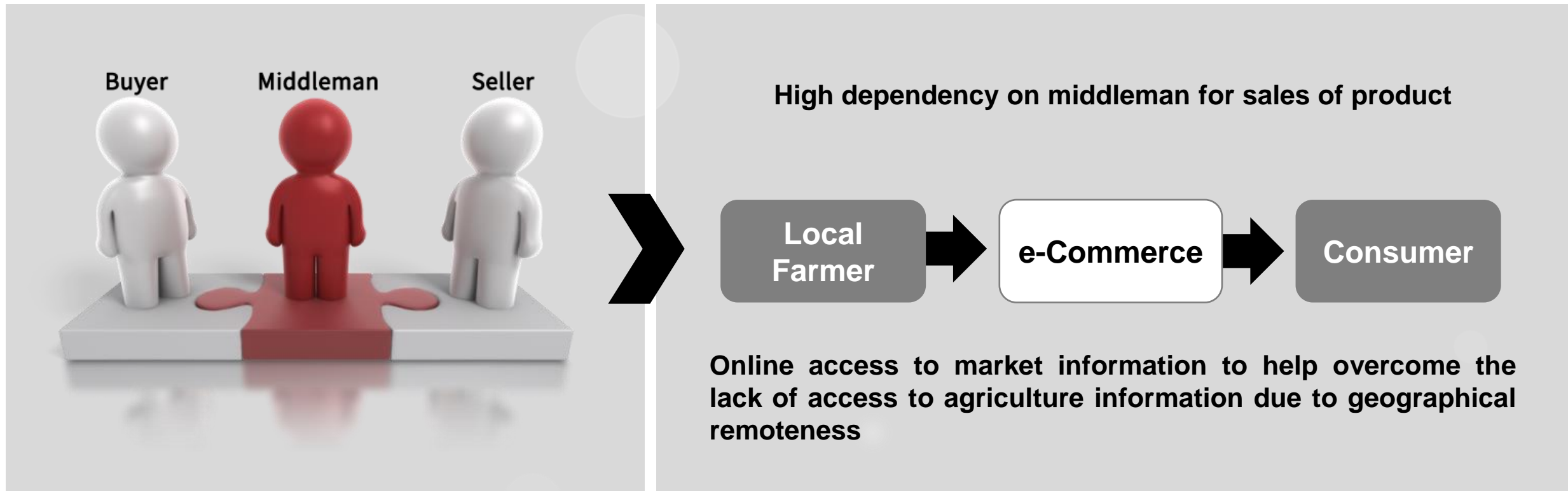


GiGA Island project in Bangladesh

e-commerce project

Overcoming the Middleman through e-Commerce

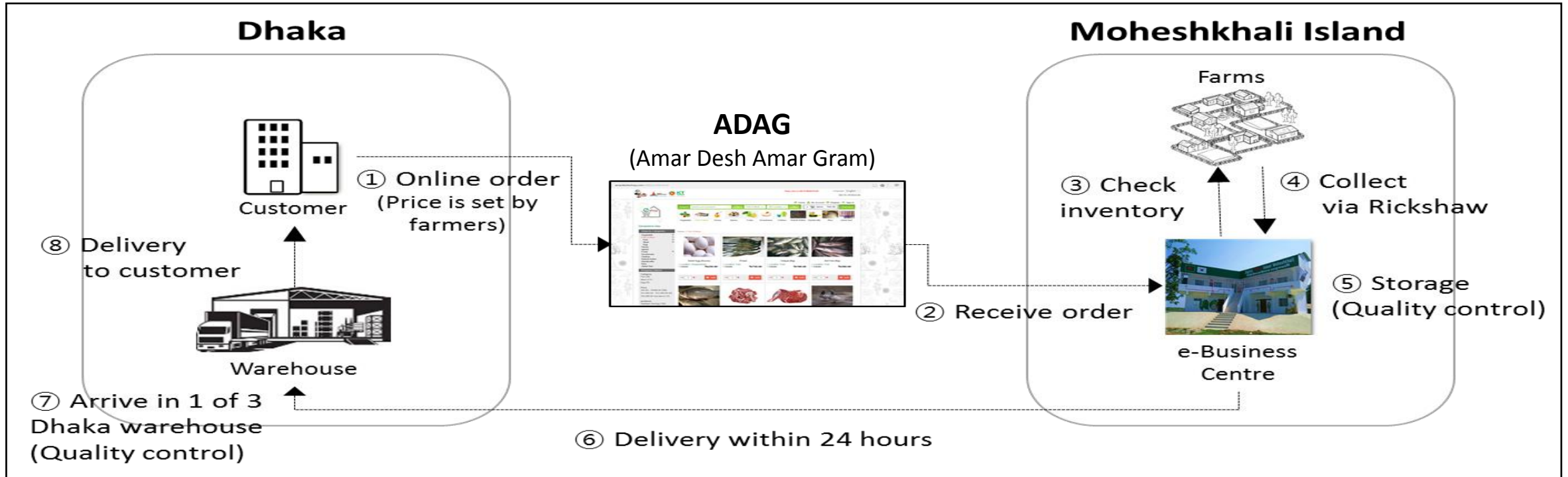
: Direct distribution gateway to local farmers (no commission)



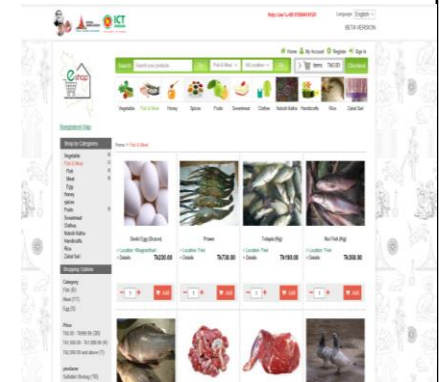


GiGA Island project in Bangladesh

e-commerce project: overall distribution channel



[e-Business Centre in Moheshkhali Island]



[e-commerce website]



Thank you

