

Mainstreaming Natural Capital into Transport Sector Planning

ADB RTA 44141-012 - Promoting Ecosystem
Services and sustainable financing in the Asia
Pacific

Natural Capital Platform Meeting
Hanoi – 7 June 2016

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Outline of talk

Background on project

Study site & initial activities

Next steps

Study objectives

- **Assist the Government of Viet Nam to manage their GMS RIF investments** in a manner that contributes to the country's **Green Growth Strategy**
- **Inform transport planning** through the mainstreaming of ecosystem services into investment design and decision making
- **Build capacity in natural capital assessment and strengthen Natural Capital Partnerships**

Project Components

- Building capacity to integrate natural capital into planning processes
 - Strategic assessment at landscape scale
 - Project level assessment
 - Draft road map for mainstreaming natural capital into planning processes for the transport sector
- Knowledge sharing & building partnerships
 - Expert group, training workshops, development of technical guidance, knowledge product

Key questions informed by an Ecosystem Services assessment

- How do roads affect natural capital / ecosystem services?
- How do natural capital / ecosystem services support road investments & broader development objectives?
- How can road investment projects be designed to promote **inclusive green growth**?
 - How do you ensure that road developments facilitate accessible transport that allows low income people to travel to get new jobs & access markets?
 - How can carbon emissions be minimized and are carbon neutral options achieved?
 - How can ecosystems services be managed efficiently to support the holistic development of the area?

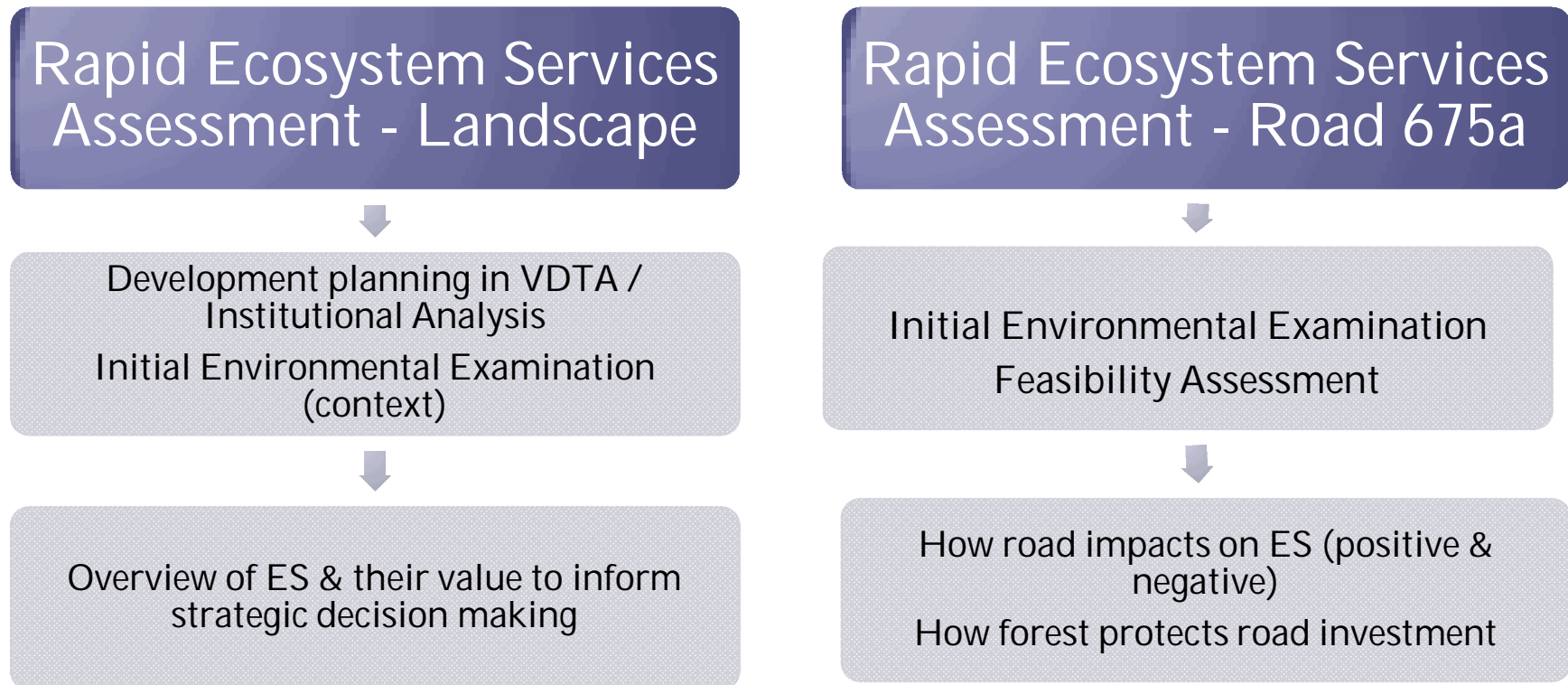
**TA-8849 (VIE): Support to
Border Areas Development -
01 Preparation for Support to
Border Areas Development**

Project objective

help the Viet Nam Development Triangle Area provinces - Kon Tum, Gia Lai, Dak Lak, Dak Nong, and Binh Phuoc - better realize their growth potential

- *developing critical transport infrastructure*
- *facilitate logistics and trade*
- *develop the Provinces capacity for investment planning from a regional integration perspective*

Proposed support to Border Areas Development Project – Phase 1 – March – July 2016

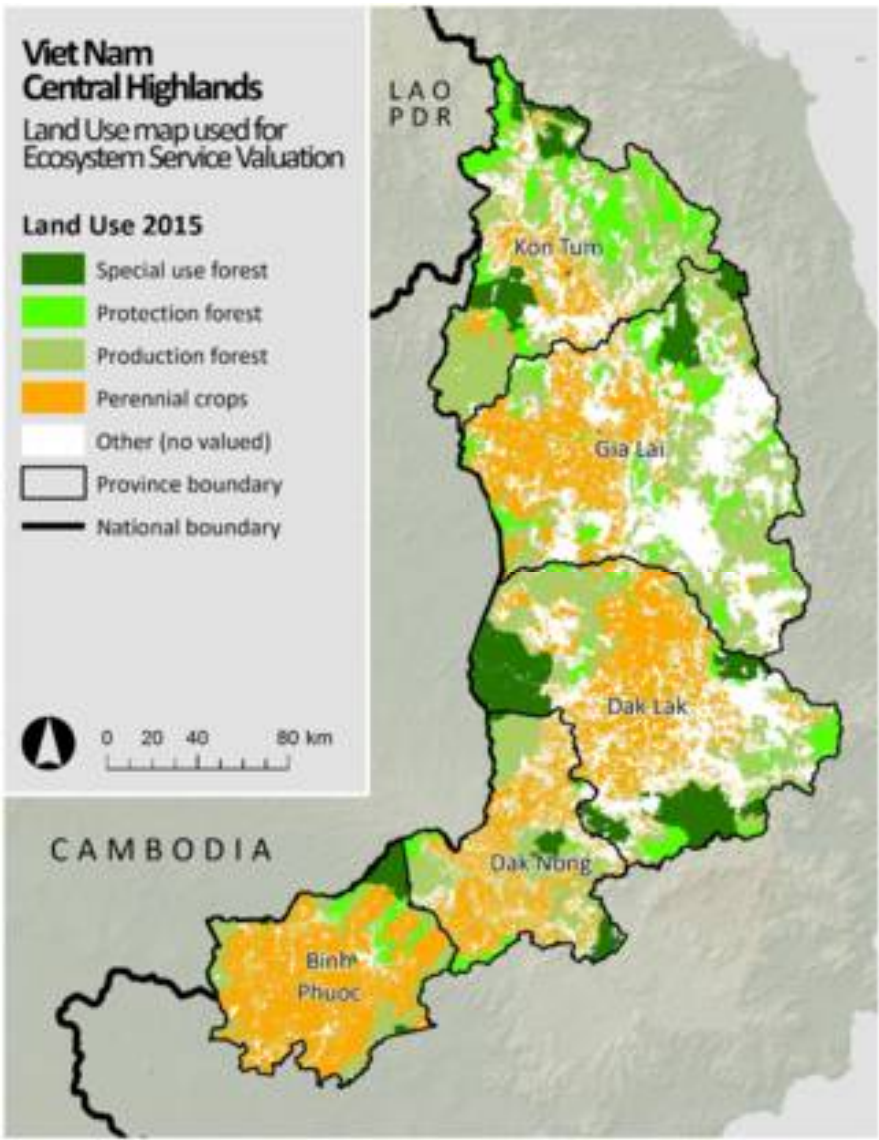


Spatial Multi- Criteria Evaluation



**Viet Nam
Central Highlands**
Land Use map used for
Ecosystem Service Valuation

- Land Use 2015**
- Special use forest
 - Protection forest
 - Production forest
 - Perennial crops
 - Other (no valued)
 - Province boundary
 - National boundary



Preliminary findings

- **High dependence on ecosystem** – land, forest, water (groundwater)
- **Key services** - agriculture products, NTFPs, water provision, watershed services, cultural / tourism
- **Pressures** – forest encroachment, land use change
- **Challenges** – water availability, developing sustainable livelihoods
- **Opportunities** – sustainable land (agricultural) management practices, storage and processing, tourism, investment in natural capital



Next Steps (July-December 2016)

- Development of Rapid Ecosystem Assessment
- Development of methodological guidance based on pilot study
- Capacity building
 - Training workshops
 - Working Group Meetings
 - SGI workshop (regional event) *tbc*

Assessing impact of roads on ecosystem services

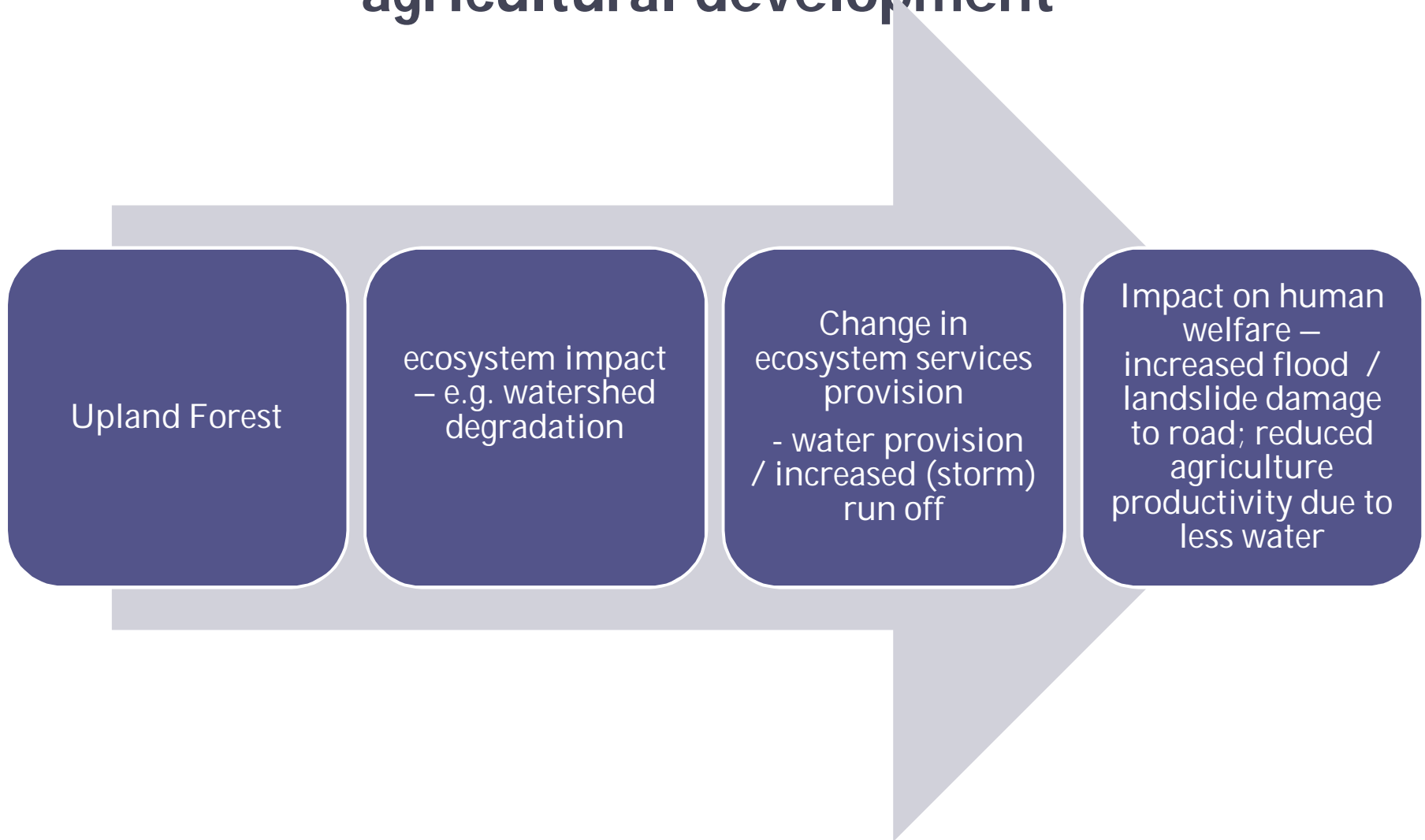
Road development

ecosystem impact – e.g. watershed degradation

Change in ecosystem services provision
- increased (storm) run off

Impact on human welfare – increased flood damage to crops, property

Assessing support of ES to road investments & agricultural development



ES Type	Service	Benefit / outcome
Provisioning Services	Food	Wild meats, fruits, crops, freshwater fish harvested for commercial and subsistence purposes.
	Wood	Timber, fuel wood and fibre
	Water	Public water supply, water for industrial and agricultural usage
	Natural medicines and bio-chemicals	Natural medicines
	Source of energy (fuel etc)	Energy provision e.g., hydropower
Regulating Services	Regulation of GHGs	Carbon sequestration
	Micro-climate stabilization	Air quality
	Water regulation (storage and retention)	Flood and storm protection
	Waste processing	Detoxification of water and sediment / waste
	Nutrient retention	Improved water quality
	Pollination	Improve crop productivity, for example near forested areas
Cultural Services	Spiritual, religious, cultural heritage	Use of environment in books, film, painting, folklore, national symbols, architecture, advertising
	Educational	A 'natural field laboratory' for understanding biological processes
	Recreation and ecotourism	Bird watching, hiking, canoeing
	Landscape and amenity	Property price premiums due to views
	Biodiversity non-use	Enhanced wellbeing associated for example with bequest or altruistic motivations

Thank you

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