

Impact Assessment of Transport Infrastructure Projects in Northern Vietnam

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GRIPS

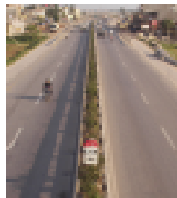
Study Objective

- Assessment of economic and social impacts of two JBIC assisted projects: Highway No.5 and Hai Phong Port
- Examination of the role of large scale economic infrastructure in achieving economic growth and poverty reduction
- Contribution to the recent effort to extend the scope of the CPRGS

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The Projects

- (1) National Highway No.5 Improvement Project
1994-2000: all phases completed
(Jan. 1999: practically in use)
JPY 20.961 billion (US\$175 million), Phase 1 - 3

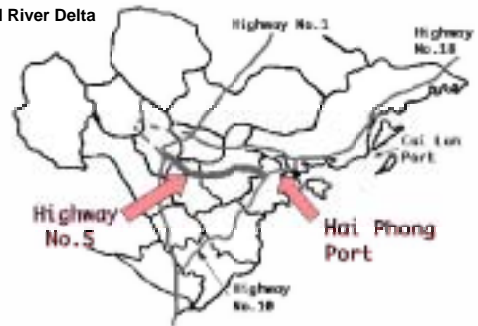


- (2) Hai Phong Port Rehabilitation Project
1994-2000: Phase 1 completed
JPY 3.975 billion (US\$ 33 million), Phase 1

3

Location of the JBIC transport projects

Red River Delta



Bridge construction projects are not included in this map.

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Study Area

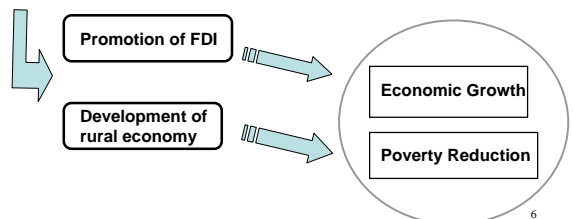
Red River Delta



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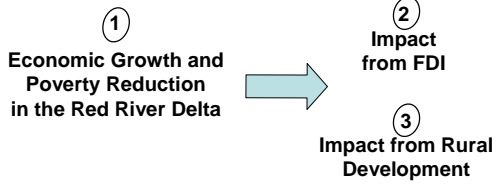
Process for the Impact

Improvement of
Highway No.5
Hai Phong Port



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Framework of the presentation



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① Economic Growth and Poverty Reduction in the Red River Delta

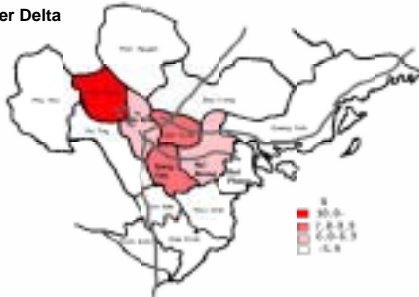
-Connected vs. unconnected -

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Trend in Economic Growth

(1) Growth rate of per capita GRP, annual average 1995-2000

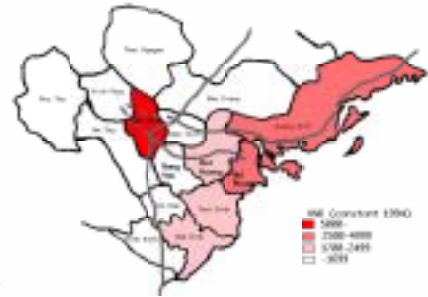
Red River Delta



Trend in Economic Growth

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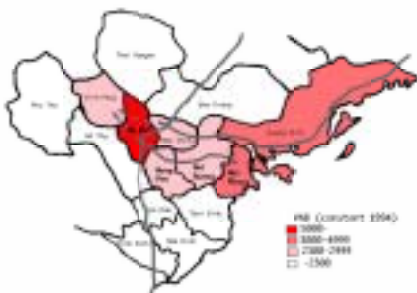
(2) Per capita GRP in 1995



Trend in Economic Growth

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(3) Per capita GRP in 2000



Trend in Economic Growth

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Comparison of Hung Yen and Thai Nguyen

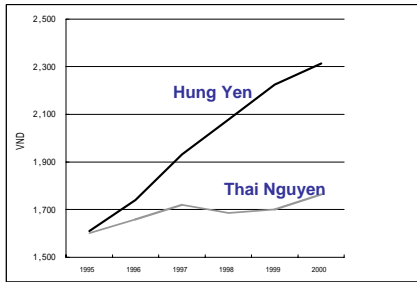
(1) Location of the two provinces



Trend in Economic Growth

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(2) Per capita GRP of the two provinces (constant 1994 prices)



Trend in Economic Growth

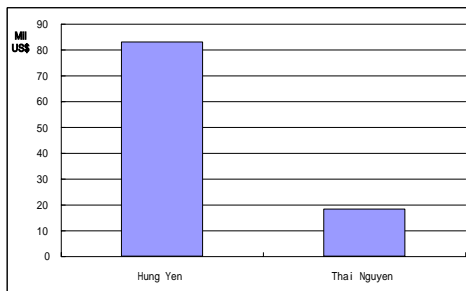
(3) Sector composition of GRP in the two provinces

(%)	1995	1996	1997	1998	1999	2000
Hung Yen						
Agriculture	53	56	46	45	43	43
Industry	15	15	22	24	29	27
Service	33	29	32	30	29	30
Total	100	100	100	100	100	100
Thai Nguyen						
Agriculture	30	32	31	33	35	35
Industry	35	34	34	33	30	30
Service	36	34	35	35	35	35
Total	100	100	100	100	100	100

Source: Figures on Social Development in "Doi Moi" Period in Vietna

Trend in Economic Growth

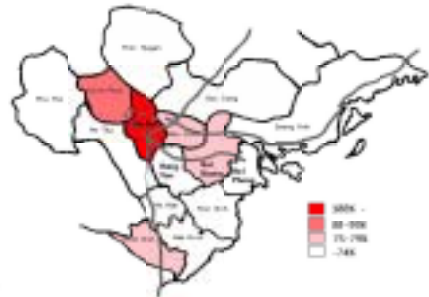
(4) Invested Capital of FDI to the two provinces, 1993-2002



Trend in Economic Growth

Trend in Poverty Reduction

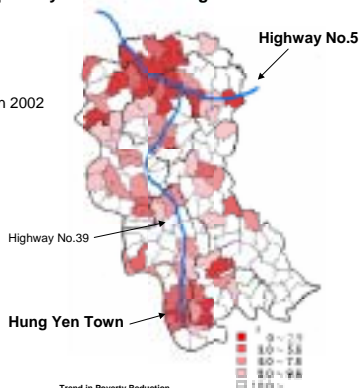
(1) Reduction in the number of poor HH, 1998-2000



Trend in Poverty Reduction

(2) Impact on poverty reduction in Hung Yen

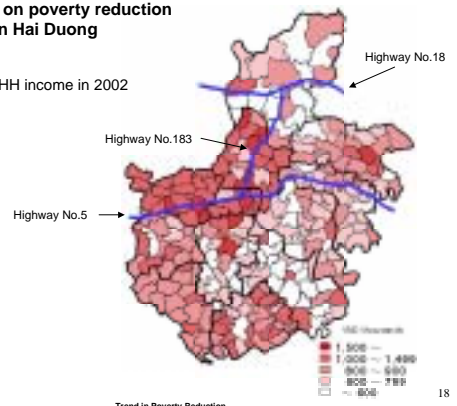
Share of poor HH in 2002



Trend in Poverty Reduction

(3) Impact on poverty reduction in Hai Duong

Average HH income in 2002



Trend in Poverty Reduction

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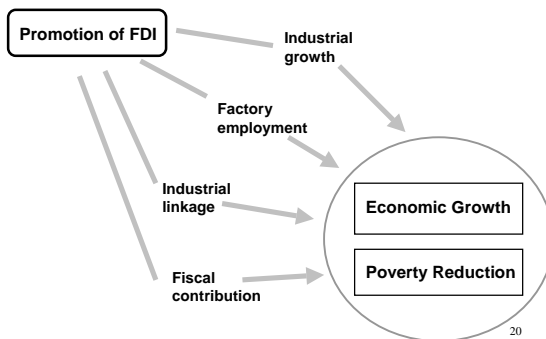
Impact from FDI



Impact from FDI

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Impact from FDI

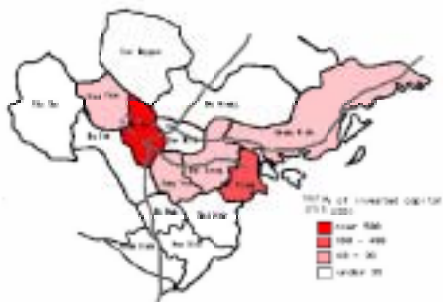


Impact from FDI

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Where foreigners invested after the transport projects?

Total amount of foreign invested capital, 1999-2002



Impact from FDI

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Frequent use of well-developed transport infrastructure

FDI Type	Production Site	Main Market	Export channel	Import channel	Use of HP port	Use of HMS	Business examples
1	Ha Noi		Hai Phong	Hai Phong	XX	XX	OA products
2	Ha Noi	Local	Hai Phong	Hai Phong	XX	XX	sanitary ware
3	Ha Noi	Local		Hai Phong	XX	X	glass ware
4	Ha Noi		Internet				software
5	Ha Noi		Noi Bai	Hai Phong	X	X	electronic parts
6	Hai Phong		Hai Phong	Hai Phong	XX		clothes, bags
7	Hai Phong	Local		Hai Phong	XX	X	glass container
8	Hai Phong	Local	Hai Phong	Hai Phong	XXX	XX	heavy metal structure
9	Hai Phong		Noi Bai	Noi Bai		XX	jewelry
10	Vinh Phuc	Local		Hai Phong	X	X	motorbike

Note: X shows frequency of use.
Source: Interview survey by the study team.

Impact from FDI

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Quantitative assessment of the growth impact

Assumption

- (1) GDP is estimated with the Cobb-Douglas production function
- (2) 90% of FDI would not be realized in the region without the projects

Contribution of FDI on GDP growth in 2001

+1.9%

Contribution of FDI on GRP growth in the Red River Delta in 2001

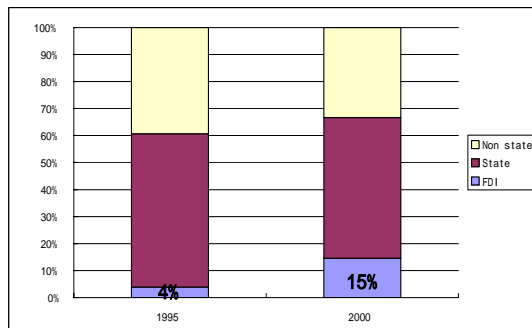
+9.6%

Impact from FDI

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Share of FDI sector in the four provinces

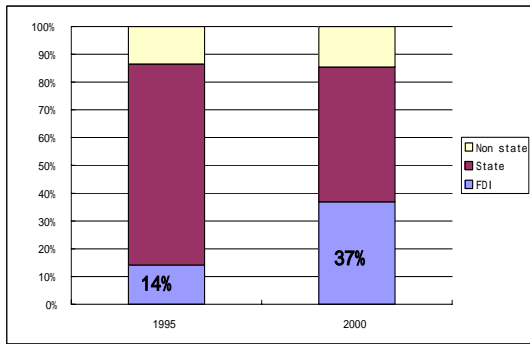
(1) Gross Regional Products



Impact from FDI

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(2) Industrial Gross Output



Impact from FDI

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Creation of Employment by FDI

Amount of employment at major industrial zones

	Current	Expected
Thang Long	3,766	3,200
Sai Dong B	5,867	-
Noi Bai	1,269	-
Nomura Hai Phong	3,017	2,500
Total	13,919	

Amount of employment at provincial industrial zones

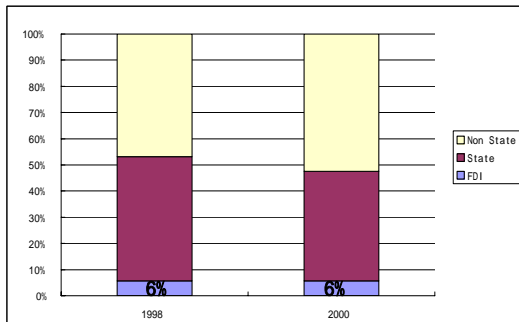
	Current
Hung Yen IZs	5,800 (FDI) 7,000 (Domestic private)



Impact from FDI

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Share of FDI sector in the four provinces (3) Industrial labor force



Impact from FDI

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Linkage with local industry

Mostly service business

e.g. Transport, Real estate, catering, commerce



Linkage with local manufacturing industry

- very limited,
- parts or components are hardly procured from local producers.

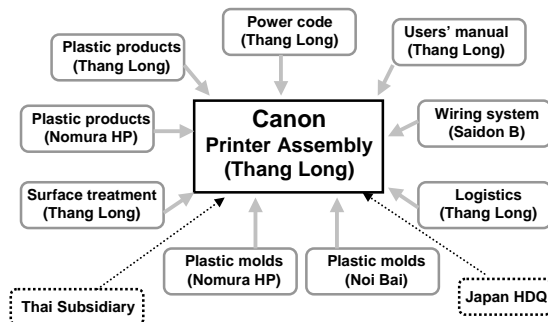
Types of FDI with significant linkage with local industry

- Natural resource based FDI
e.g. cement, sanitary ware
- Food processing FDI
e.g. snack noodle, confectionary

Impact from FDI

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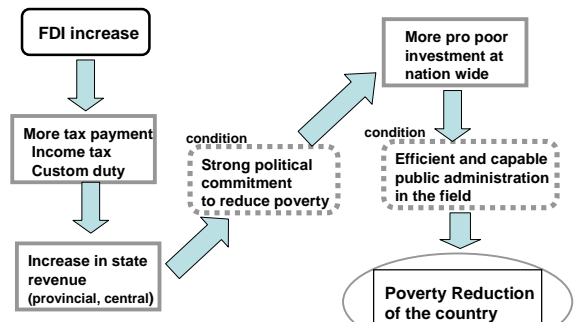
Satellite investment of FDI's "Canon effect"



Impact from FDI

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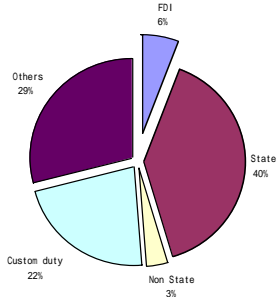
Fiscal contribution by FDI



Impact from FDI

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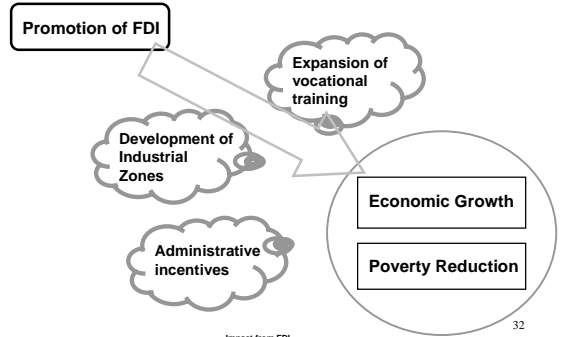
Structure of the total state revenue of the four provinces in 2000



Impact from FDI

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Concurring interventions



Impact from FDI

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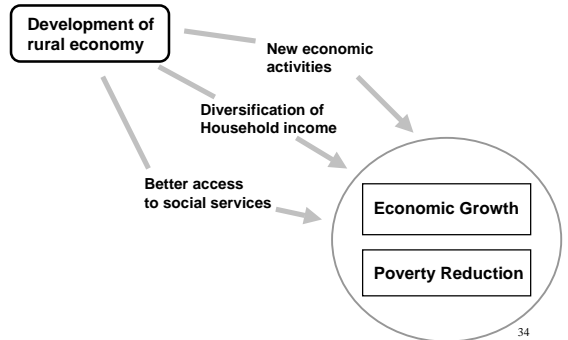
Impact from Rural Development



Impact from Rural Development

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Impact from Rural Development



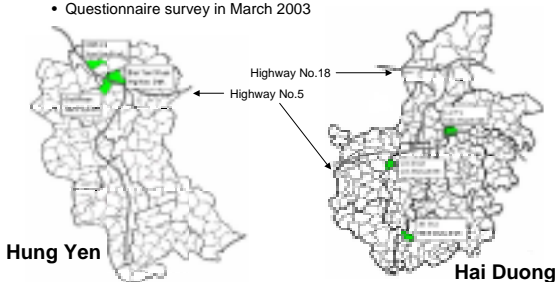
Impact from Rural Development

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Main source of information:

Rural households survey

- Randomly selected 200 households (HH)
- Six communes in Hung Yen and Hai Duong Provinces
- Questionnaire survey in March 2003



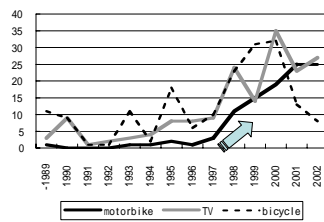
Impact from Rural Development

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Property ownership for the surveyed households

Motorbike: 52%
TV: 86%
Bicycle: 91%

Year of purchasing durable goods for the surveyed households

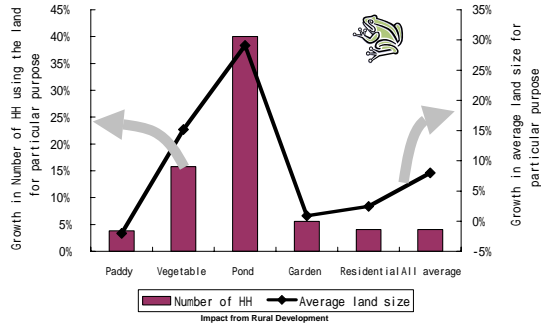


Impact from Rural Development

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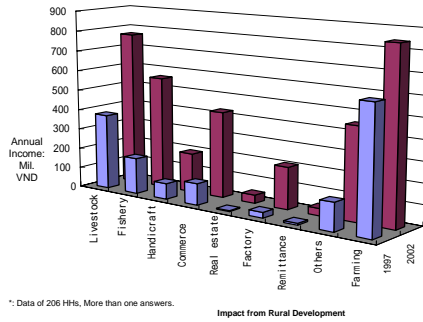
New Economic Activities

Change in land use pattern of the surveyed HHs; 1997-2002



Diversification of income sources

Structure of income for the averaged HHs*; surveyed data 1997-2002



*: Data of 206 HHs. More than one answers.

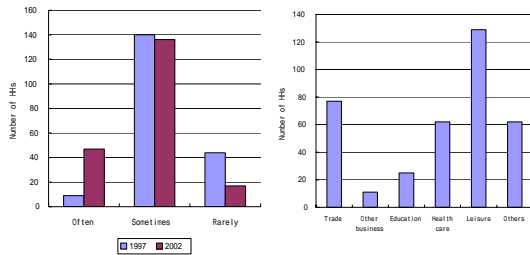
Impact from Rural Development

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Better Access to Social Service

Changes in frequency to visit the cities for the surveyed HHs*

Main purpose to visit cities for the surveyed HHs*



*: Data of 200 HHs of the survey

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Impact from Rural Development

Concurring interventions

Development of rural economy

Expansion of Agricultural Extension service

Doi Moi in Agriculture policy

Expansion of agricultural credit service

Diversified marketing channels

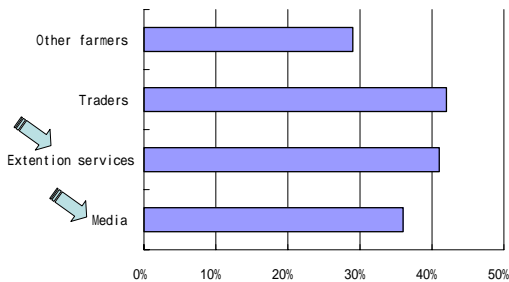
Economic Growth

Poverty Reduction

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Sources of information about new business



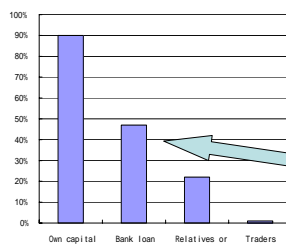
*: Data of 73 HHs, which started new business. More than one answers

Impact from Rural Development

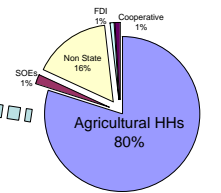
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Expansion of agricultural credit service

Sources of initial capital to start new business for the surveyed HHs*



Portfolio composition of the Bank for Agriculture, Hai Duong Branch (March, 2003)



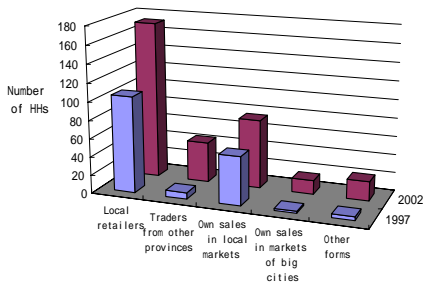
*: Data of 77 HHs, which started new business

Impact from Rural Development

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Expansion of marketing channels

Changes in distribution channels for the surveyed HHs*



*: Data of 195 HHs replied to the questionnaire. More than one answers

Impact from Rural Development

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Concluding remarks

(1) Impact of Highway No.5 and Hai Phong Port

Ha Noi - Hai Phong Transport Corridor

- Strategic part of the road network in the Red River Delta
- New axis of economic growth
- Significant reduction of poverty in the region

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Concluding remarks

(2) Impact from FDI

Significant growth impact

9.6 % increase of the GRP in 2001

Over 1/3 of gross industrial output in the region

Significant but still limited impact on poverty reduction

Increasing but small employment impact

Weak linkage with local economy

Small fiscal contribution

Larger and wider impact is expected within a foreseeable future

Frequent use of Highway No.5 and Hai Phong Port

Distribution, export, import, business meeting, etc.

⇒ Highway No.5 and Hai Phong Port were preconditions.

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Concluding remarks

(3) Impact from Rural Development

Significant structural transformation

Diversified income sources

Rapid expansion of new business

Local economy itself is the driving force.

Well prepared rural households

Doi Moi restructuring policy

Extension service, Credit service, etc.

⇒ Highway No.5 and Hai Phong Port were triggers.

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