

Danang People's Committee Japan International Cooperation Agency



3rd Steering Committee Meeting on Integrated Development Strategy for Danang City and Its Neighboring Area (DaCRISS)

June 16th 2009 Danang City JICA Study Team

Purpose of the Meeting

- to present a brief progress of the Study
- to identify main problems and issues facing the CFEZ
- to discuss vision and long-term growth and development strategies of the CFEZ
- to discuss role-sharing among provinces in the CFEZ on identified strategic development agenda
- to explain the next steps

DaCRISS and Its Overall Progress

- Supplemental surveys (Household Interview Survey, Commune Survey, Establishment Survey, Tourist Interview Survey, Traffic / Transport Survey)
- Field Visits
- Meetings/Interviews
- Technical Working Group Meetings
- Counterpart Team Meetings
- Situational Analysis
- Discussions on Long-term
 Development Strategies
- Provincial Workshops
- Preparation of Progress Report

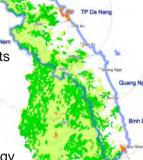
| Year/ Month | TASK / WORK ITEMS | SC., Report Seminars |
|----------------|--|--------------------------------|
| 2008/6 | Task1: Preparatory Work | Inception Report |
| , | | 1 st S/C |
| 8 | Task2: Collection of Necessary Data a Analysis of Existing Conditions | |
| 9 | | |
| 10 | Task 3: Vision and Strategies | |
| 11 | | 2nd S/C |
| 12 | Task 4: Urban Development Task Master Plan (2025) | Jerminar (1) |
| 2009/1+2 | Iviaster Plan (2025) | Progress Report |
| 3,4 | Task 5: Urban Transport Task 6: Sustair | |
| 5 | Program Environmental F | Program |
| 6 | Task 8: Implementation Plan | egic Report |
| 7 | (2015) Envir | onmental |
| 8 | (2013) Asses | ssment |
| 9 | Task 9: Capacity Development | Draft Final |
| 10 | | Sth S/C |
| 11 | | Seminar (4) Final Report |

Framework of Provincial Workshops Conducted



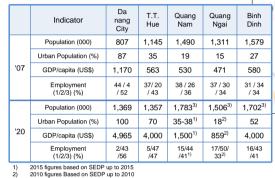
Regional Development Concept and Strategy

- Current development orientation
- Analysis on development constraints and opportunities
- Proposed development vision and strategies
- Possible role-sharing among provinces for development in synergy



Development Orientation in the Current SEDPs

- Developing the comparative advantages of the Central Region (infrastructure, inter and intra regional cooperation)
- Pursue economically, socially, and environmentally sustainable development
- Urbanization and industrialization





Sustainable

Development Aspect

Economic

Social

Environment

Governance

Current Situation of CFEZ Provinces

- High economic growth
- FDI (US\$ 7 bil. = VND 13,000 bil.)
- Trade and tourism

| | | | Da Nang City | T.T. Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ |
|-------------------------|-----------------------|--|-----------------|----------|--------------|---------------|-----------|--------|
| Area (km ²) | | | 1,283 | 5,065 | 10,409 | 5,153 | 6,039 | 27,949 |
| Population (0 | 000) | | 807 | 1,145 | 1,490 | 1,311 | 1,579 | 6,332 |
| % of Urban F | opulation | | 87 | 35 | 19 | 15 | 27 | 31 |
| Population | Urban | | 3.58 | 3.91 | 5.75 | 3.33 | 2.15 | 3.60 |
| Growth 02-07 | Rural | | -7.07 | -0.42 | -0.09 | 0.55 | 0.11 | -0.15 |
| (%/year) | Total | | 1.71 | 0.96 | 0.89 | 0.93 | 0.63 | 0.95 |
| | VND billior | า | 15,107 | 10,314 | 12,630 | 9,885 | 14,649 | 62,585 |
| GRDP | Growth (% | Growth (% per year) | | 10.7 | 11.4 | 10.7 | 9.9 | 11.5 |
| | VND thousand / capita | | 18,726 | 9,006 | 8,479 | 7,538 | 9,278 | 9,884 |
| FDI | Number of | Projects | 536 | 44 | 66 | 13 | 31 | 690 |
| 00-07 1) | US\$ mil | | 4,751 | 443 | 558 | 863 | 363 | 6,979 |
| Terela | Import (US | Import (US\$ mil) Export (US\$ mil) | | 55 | 212 | 20 | 142 | 951 |
| Trade | Export (US | | | 81 | 176 | 58 | 327 | 1,112 |
| | No of | Foreign | 50 | 636 | 892 | 17 | 35 | 1,629 |
| Tourism | Tourists (000) | Domestic | 20 | 667 | 698 | 244 | 352 | 1,981 |
| | Receipt (U | IS\$ mil) 2) | 32 | 39 | 28 | 4 | 4 | 108 |

Source: Most is 2007 data from Statistical Yearbooks, except the following data listed below

1) 2003-2007 data for Quang Ngai, 2002-2007 data for Binh Dinh

2) 2006 data for Binh Dinh

Main Issues Identified in Provincial SEDPs

Danang City

Estimated

- low economic growth due to failure in tapping potential and advantages
- slow implementation of infrastructure and FDI projects
- low technology level, resulting in small production scale and low competitiveness of products
- environmental pollution
- heavy reliance of city revenue from land development
- others

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Main Issues Identified in Provincial SEDPs

Thua Thien Hue Province Sustainable Development Aspect low competitiveness of provincial products low level of GRDP (81% of national Economic average) low level of FDI ٠ Social poor rural infrastructure insufficient financial savings Environment rapid degradation of natural resources due to intensive agricultural development unclear division and insufficient reform of Governance administration

• others

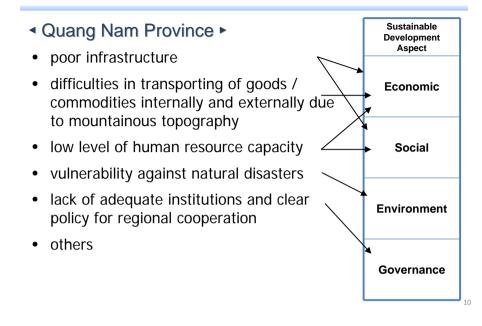
Main Issues Identified in Provincial SEDPs

Quang Ngai Province

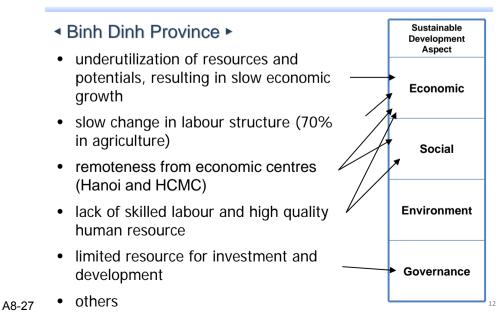
- weak local economy
- low productivity of agriculture sector
- · high poverty rate in households
- lack of competent technical / scientific human resource and skilled labour (10.7%)
- vulnerability to flood due to heavy rains
- mountainous topography
- heavy dependence on subsidy from state budget (70%)

Sustainable Development Aspect Economic Social Environment Governance

Main Issues Identified in Provincial SEDPs



Main Issues Identified in Provincial SEDPs



others

Current Situation Identified by Commune Survey in CFEZ

- Basic services are relatively well provided, except for piped drinking water, drainage, telephone
- Transportation within provinces need improvements

| | Danang City | TT. Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ | | | |
|-------------|--|------------------------------|--------------------|---------------|--------------|------|----|-----|----|
| | | Primary H | ealth Care | 97 | 94 | 97 | 84 | 100 | 94 |
| | | Education | Primary | 98 | 92 | 95 | 93 | 100 | 95 |
| | | Education | Secondary | 98 | 84 | 91 | 89 | 96 | 90 |
| Coverage of | Services (%) | Piped Drin | king Water | 72 | 62 | 65 | 41 | 51 | 58 |
| Te | | Elec | tricity | 100 | 85 | 89 | 90 | 97 | 91 |
| | | Telephone | | 73 | 48 | 32 | 20 | 53 | 40 |
| | | Drainage | | 75 | 51 | 46 | 19 | 81 | 59 |
| | From | Average Di | stance (km) | 5 | 15 | 17 | 12 | 12 | 12 |
| | Commune Center to District Center | Seasonal Di | isruption (%) | 16 | 36 | 33 | 87 | 47 | 48 |
| Road | | Vehicle Travel Time (min) | | 12 | 27 | 33 | 35 | 22 | 26 |
| Conditions | From | Average Di | stance (km) | 8 | 40 | 75 | 48 | 67 | 47 |
| | Commune Center | Seasonal Di | isruption (%) | 11 | 39 | 25 | 79 | 36 | 41 |
| | to Provincial Center | | ravel Time iin) | 22 | 58 | 116 | 89 | 78 | 72 |

Source: DaCRISS Commune Survey, 2008

Environmental Problems Perceived by Communes in CFEZ (% who replied "Significant problem" or "Very severe problem")

- Flooding, deforestation, landslide are main environmental concerns in the CEFZ, though the concerns vary by province

| Prov | vince | Danang City | Thua Thien Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ |
|-------------|--------------------|----------------|-------------------|--------------|---------------|--------------|------|
| Groundwate | er Pollution | 20 | 7 | 0 | 0 | 0 | 3 |
| Surface Wat | ter Pollution | 18 | 8 | 0 | 0 | 0 | 3 |
| Saline Ir | ntrusion | 2 | 4 | 0 | 0 | 1 | 1 |
| Soil Pc | ollution | 2 | 3 | 0 | 0 | 0 | 1 |
| Solid \ | Solid Waste | | | 0 | 1 | 0 | 1 |
| Air Po | Air Pollution | | | 0 | 4 | 0 | 4 |
| Defore | station | 5 | 20 | 5 | 9 | 9 | 10 |
| Soil Er | Soil Erosion | | | 4 | 8 | 3 | 8 |
| Land | Landslide | | | 3 | 6 | 2 | 10 |
| | Gradual Inundation | 5 | 34 | 2 | 35 | 36 | 23 |
| Flooding | Flash Floods | 13 | 25 | 12 | 19 | 5 | 15 |
| | Storm Surges | 7 | 5 | 0 | 1 | 0 | 2 |

Priority Infrastructure Services Identified by Communes in CFEZ¹⁾

• Roads, vocational training services, water supply and education are priority concerns of communes in the CFEZ

| | Service | Danang City | Thua Thien Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ |
|----------------------|------------------------------|----------------|-------------------|--------------|---------------|--------------|------|
| | Roads | 18 | 24 | 20 | 32 | 13 | 22 |
| 1.6 | Power supply | 2 | 5 | 8 | 13 | 1 | 7 |
| Infrastructure | Water supply | 5 | 11 | 3 | 3 | 38 | 12 |
| | Drainage | 6 | 7 | 0 | 0 | 1 | 2 |
| Human Development | Education services | 18 | 12 | 17 | 14 | 2 | 12 |
| | Health services | 6 | 4 | 18 | 3 | 5 | 8 |
| Development | Vocational training services | 10 | 13 | 9 | 7 | 26 | 13 |
| Urban Land | Land for enterprises | 4 | 4 | 3 | 7 | 1 | 4 |
| Urban Land | Land for housing | 4 | 2 | 1 | 0 | 9 | 3 |
| Environment | Pollution control | 7 | 3 | 2 | 1 | 1 | 2 |
| Environment | Environmental protection | 10 | 10 | 5 | 3 | 1 | 5 |
| Dulla | Provincial policy | 8 | 3 | 10 | 14 | 1 | 8 |
| Policy | National policy | 2 | 2 | 5 | 3 | 1 | 3 |
| | Total | 100% | 100% | 100% | 100% | 100% | 100% |

Source: DaCRISS Commune Survey, 2008

1) Calculated based on scores given proportianate to the order of priority

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Development Constraints Perceived by Communes in CFEZ

(% who replied "Major obstacle" or "Severe obstacle")

- Water supply and roads are main concerns on infrastructure services indentified by communes in the CFEZ
- Skilled labor, knowledge and capacity of people, access to credit are main inputs required for development identified by communes in CFEZ

| | Province | Danang City | Thua Thien Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ |
|----------------------------|-------------------------------------|----------------|-------------------|--------------|---------------|--------------|------|
| | Road Access | 20 | 24 | 50 | 43 | 20 | 35 |
| | Power Supply | 2 | 13 | 45 | 36 | 1 | 25 |
| Infrastructure | Water Supply | 14 | 60 | 10 | 55 | 87 | 46 |
| and Service Factors (%) | Drainage | 41 | 19 | 4 | 46 | 0 | 18 |
| () | Education Services | 4 | 16 | 46 | 14 | 4 | 22 |
| | Health Services | 9 | 16 | 48 | 18 | 4 | 23 |
| | Land for Agricultural Production | 29 | 8 | 11 | 11 | 60 | 22 |
| | Land for Housing | 16 | 3 | 15 | 1 | 20 | 11 |
| Required Inputs to | Land for Enterprises | 30 | 7 | 25 | 13 | 8 | 16 |
| Facilitate | Skilled Labor | 50 | 68 | 66 | 91 | 91 | 76 |
| Development (%) | Knowledge and Capacity of People | 38 | 70 | 67 | 97 | 53 | 69 |
| | Access to Credit | 21 | 39 | 55 | 98 | 15 | 51 |
| | Price of Physical Inputs | 50 | 20 | 44 | 92 | 6 | 43 |

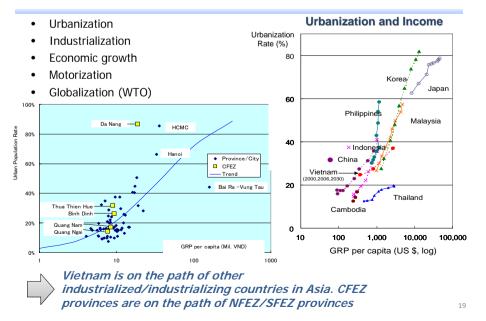
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A8-28 Source: DaCRISS Commune Survey, 2008

- Development Opportunities Identified by Communes in CFEZ (% who replied "High potential" or "Very high potential")
- Agriculture, services, tourism (eco-tourism), craft industry are considered as high potential sectors by communes in the CFEZ
- A need for farther study on agricultural sector development strategy

| Province | | Thua Thien Hue | Quang Nam | Quang Ngai | Binh Dinh | CFEZ |
|--|---|--|--|--|--|---|
| Crops | 13 | 16 | 36 | 10 | 1 | 18 |
| Livestock | 9 | 7 | 28 | 13 | 22 | 18 |
| Aquacultural | 13 | 28 | 9 | 16 | 15 | 16 |
| Forestry | 11 | 28 | 43 | 37 | 36 | 35 |
| Agricultural, , and Forestry ducts | 13 | 17 | 8 | 28 | 15 | 16 |
| Mining and Other Extractive Industry | | 13 | 4 | 15 | 0 | 7 |
| Craft Industry | 16 | 11 | 15 | 14 | 20 | 15 |
| Mass | 9 | 16 | 6 | 2 | 1 | 6 |
| Eco | 23 | 28 | 13 | 3 | 35 | 19 |
| Manufacturing Industries | | 3 | 5 | 13 | 2 | 6 |
| Construction | | 3 | 3 | 16 | 13 | 8 |
| commercial | 38 | 34 | 13 | 28 | 25 | 25 |
| Services | 25 | 26 | 8 | 4 | 25 | 15 |
| Other Industrial | | 1 | 3 | 2 | 0 | 3 |
| | Crops Livestock Aquacultural Forestry Agricultural, , and Forestry ducts ther Extractive ustry Craft Industry Mass Eco ng Industries ruction commercial Services | CityCrops13Livestock9Aquacultural13Forestry11Agricultural, and Forestry13Jucts4Craft Industry16Mass9Eco23ng Industries7ruction4commercial38Services25 | VinceCityThien HueCrops1316Livestock97Aquacultural1328Forestry1128Agricultural, and Forestry1317ducts413Craft Industry1611Mass916Eco2328ng Industries73cruction43commercial3834Services2526 | City Thien Hue Nam Crops 13 16 36 Livestock 9 7 28 Aquacultural 13 28 9 Forestry 11 28 43 Agricultural, , and Forestry 13 17 8 ducts 4 13 4 Craft Industry 16 11 15 Mass 9 16 6 Eco 23 28 13 ng Industries 7 3 5 rruction 4 3 3 commercial 38 34 13 | City Thien Hue Nam Ngai Crops 13 16 36 10 Livestock 9 7 28 13 Aquacultural 13 28 9 16 Forestry 11 28 43 37 Agricultural, and Forestry 13 17 8 28 ducts 4 13 4 15 Craft Industry 16 11 15 14 Mass 9 16 6 2 Eco 23 28 13 3 Ing Industries 7 3 5 13 ormmercial 38 34 13 28 | Vince City Thien Hue Nam Ngai Binh Dinh Crops 13 16 36 10 1 Livestock 9 7 28 13 22 Aquacultural 13 28 9 16 15 Forestry 11 28 43 37 36 Agricultural, and Forestry 13 17 8 28 15 dotts 13 17 8 28 15 0 Craft Industry 16 11 15 14 20 Mass 9 16 6 2 1 Eco 23 28 13 3 35 ng Industries 7 3 5 13 2 ruction 4 3 3 16 13 ommercial 38 34 13 28 25 |

Impacts on the Development of CFEZ



Assessment of the Region (Summary)

Weakness and Threats

- Strength and Opportunities
- Small local market (small population & low income)
- Distance from competitive growth centres (NFEZ, SFEZ)¹⁾
- Poor integration between provinces²⁾
- Inadequate infrastructure
- Unknown to the world
- Vulnerability to natural disasters
- Degrading environment
- Lack of qualified human resource

1) CFEZ is still insignificant in real term

2) Inter-provincial connectivity within CFEZ in terms of transportation, industrial linkages and movement of the people and goods is still insignificant compared to those in NFEZ and SFEZ

- Rich natural / cultural resources
- Strategic location in the country and GMS region
- High potential for tourism
- Strong policy commitment of the Government for growth and poverty reduction
- Potential quality human resource
- Agriculture (to be farther studied)

Impact of Urbanization: Movement of the People in CFEZ Increasing: 162,000 or 27,000/year (1999-2005) and 163,000 or 54,000/year (2005-2008)

About 20% (Binh Dinh) to 40% (Da Nang) of the movement of the people are to SFEZ and other areas in Vietnam than CFEZ. Not many people move to NFEZ
Main movements of the people are within province and CFEZ.

| | | | | | | Fro | om | | | | | |
|--------|----------------------|-------|---------|-------|----------|-------|-----------|-------|------------|-------|-----------|--|
| 1 | Province | Dana | ng City | T.T. | T.T. Hue | | Quang Nam | | Quang Ngai | | Binh Dinh | |
| | | 99-05 | 05-08 | 99-05 | 05-08 | 99-05 | 05-08 | 99-05 | 05-08 | 99-05 | 05-08 | |
| Other | SFEZ | 20.9 | 16.3 | 21.2 | 24.4 | 22.2 | 13.0 | 19.6 | 19.4 | 20.3 | 13.1 | |
| FEZ | NFEZ | 3.8 | 3.4 | 9.2 | 10.3 | 1.1 | 0.6 | 1.8 | 1.8 | 0.1 | 0 | |
| | Danang City | 53.4 | 44.5 | 21.8 | 17.3 | 12.5 | 11.9 | 17.6 | 16.8 | 6.9 | 5.3 | |
| | Hue City | 1.3 | 1.1 | 18.6 | 15.2 | 0.6 | 0.2 | 2.1 | 1.9 | 0.1 | 0 | |
| CFEZ | Dung Quat | 1.6 | 2.7 | 1.8 | 1.6 | 2.6 | 6.7 | 19.8 | 22.7 | 1.7 | 4.1 | |
| | Elsewhere in CFEZ | 5.3 | 9.0 | 8.2 | 12.3 | 40.7 | 51.8 | 26.8 | 26.1 | 60.6 | 72.1 | |
| Elsewh | Elsewhere in Vietnam | | 23.2 | 20.3 | 18.0 | 20.4 | 15.8 | 12.1 | 11.5 | 10.3 | 5.4 | |
| Total | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| Total | No (000) | 23 | 20 | 17 | 23 | 35 | 31 | 26 | 25 | 61 | 64 | |

Source: DaCRISS Commune Survey, 2008

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Basic Development Strategies for CFEZ

Critical Issues

- The CFEZ is handicapped compared to NFEZ and SFEZ in many ways
- Widening gap among NFEZ, SFEZ and CFEZ
- CFEZ is the key to North South integration
- Strength (3 world heritage sites, beaches and mountain) and potentials (marine, forestry, human resources) are not fully tapped

■Key Strategies

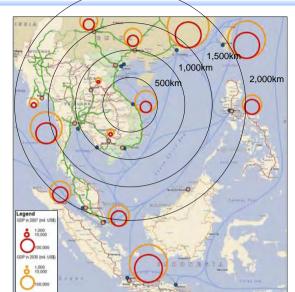
- ① Direct connection with international market (especially via air through competitive airport and air transport services)
- ② Establish competitive coastal growth (transport) corridor to strengthen connectivity and integration of provinces in CFEZ
- ③ Accelerating urban development and networking of Danang City and other main urban centres in CFEZ to establish competitive base for the growth of the region
- ④ Strengthen urban rural linkages to promote rural development
- (5) Establish coordinated strategies among provinces in CFEZ on economic development and regional management
- (6) Expand central government interventions on infrastructure development to establish competitive base for development and policy to stimulate private sector investments

Strengthening Direct Linkages between CFEZ and the World

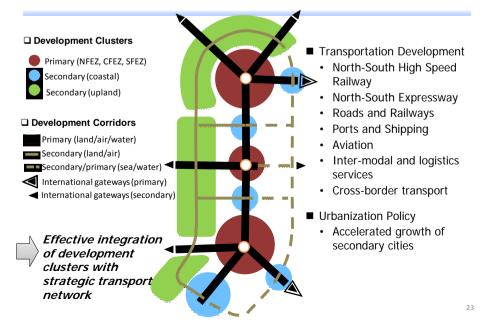
- Geographically, CFEZ is located at strategic center in ASEAN and GMS, including southern provinces of China
- Many growth centers within 1000

 1500km radius are larger than NFEZ and SFEZ.

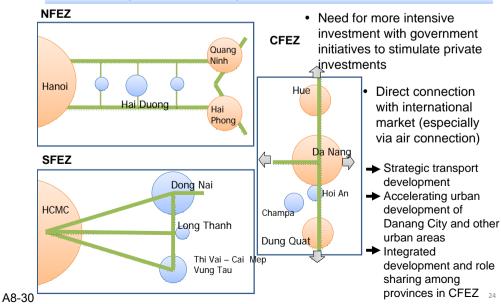
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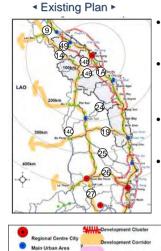
Core National Transportation Network Development Concept



Strategic Integrated Transportation- Regional Development Concepts for FEZs



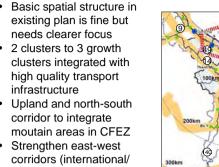
Alternative Scenario for Development Spatial Structure of the CFEZ Region



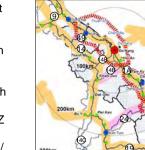
Developed Urban Corridor (Local

Urban Point

Proposed Spatial Structure



corridors (international/ domestic) to connect upland with coastal growth centers



 Development Corridors
 Urban Centers Development Clusters ✓ Hue – Danang – Hoi An ✓ NS (Coastal) ✓ Chu Lai – Dung Quat ✓ NS (Upland)

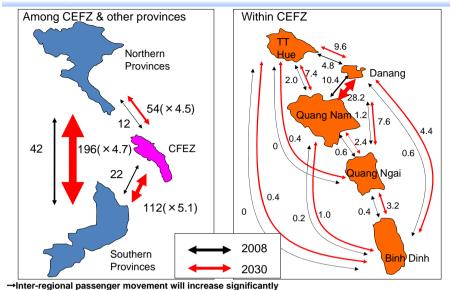
✓ Quy Nhon ✓ East – West (international)

✓ East – West (local)

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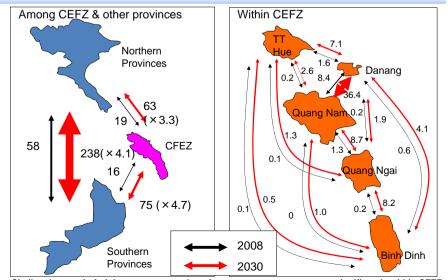
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Inter-provincial Transport Demand related to CFEZ (2008; 2030) : Passenger (000)



→Inter-provincial passenger movement within CFEZ will also increase significantly

Inter-provincial Transport Demand related to CFEZ (2008; 2030) : Freight (000 ton)



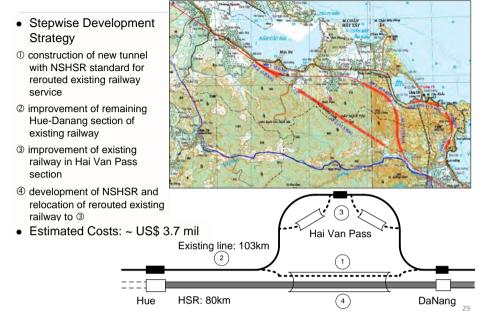
[→]Similar changes in freight movement as that of passenger movement, more significantly within CFEZ →Increase of Quang Ngai is the most significant

Danang – Quang Ngai Expressway Project



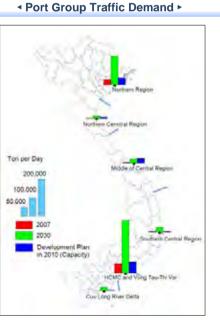
- Length: 130km
- Estimated cost: VND 25,090 billion
- Estimated opening year: 2011 2020

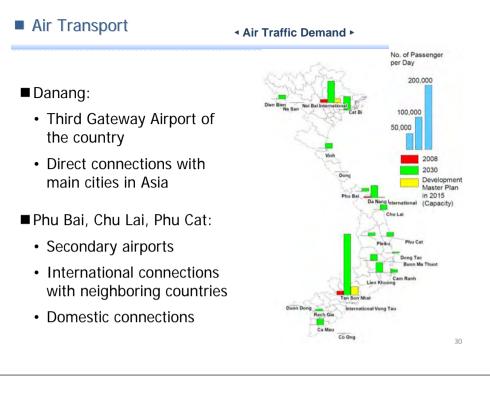
Danang–Hue Railway Improvement Project



Port and Shipping

- Port traffic demand in the Central Region will be insignificant
- Coastal shipping must respond to more high quality services





Alternative Development Scenarios

- Scenario 1: Development takes place without inter -provincial coordination
- Scenario 2: Development orientation based on the existing construction plan
- Scenario 3: Development orientation based on enhanced strategy and integration at CFEZ level

Rapid Assessment of Development Scenario

| tainability Index | Scenario 1 : Baseline (Do Nothing) | Scenario 2 : Existing Plan | Scenario 3 : Enhanced Integration |
|--|--|--|--|
| Global competitiveness Complimentality in Vietnam CFEZ integration | 1 | 2 | 3 |
| Poverty free Reduction in inequality Access to services | 1 | 2 - 3 | 3 |
| Ecology protected Pollution free Disaster preparedness | 1 | 2 | 2 - 3 |
| Good management Financial sustainability Community involvement | 1 | 2 | 2 - 3 |
| | Global competitiveness Complimentality in Vietnam CFEZ integration Poverty free Reduction in inequality Access to services Ecology protected Pollution free Disaster preparedness Good management Financial sustainability | tainability Index Baseline (Do Nothing) • Global competitiveness • Complimentality in Vietnam • CFEZ integration 1 • Poverty free • Reduction in inequality • Access to services 1 • Ecology protected • Pollution free • Disaster preparedness 1 • Good management • Financial sustainability 1 | tainability IndexBaseline (Do Nothing)Existing Plan• Global competitiveness • Complimentality in Vietnam • CFEZ integration12• Poverty free • Reduction in inequality • Access to services12 - 3• Ecology protected • Pollution free • Disaster preparedness12• Good management • Financial sustainability12 |

Proposed Vision

- Need to establish an appealing image to the world which represents the development concept of Vietnam in the future
- CFEZ must be different from SFEZ and NFEZ of which sustainability is being threatened.
- Economic Development
- Ecological balance
- Ethnological harmonization

- Technology oriented solutions
- Enhanced environmental management
- Cultural value preserved
- Human resource developed

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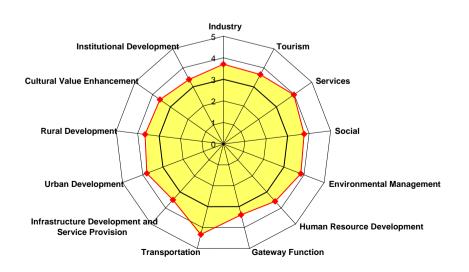
 Strategic infrastructure provided

"Eco-Techs Region"

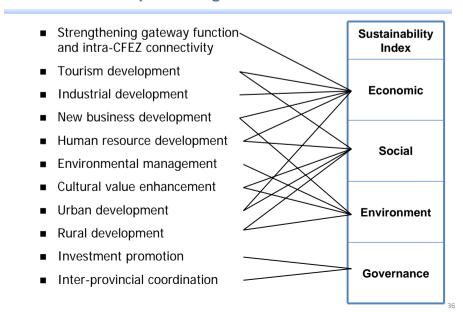
through

 To develop economically competitive, socially harmonized and environmentally sustainable region through much enhanced inter-provincial coordination

Main Development Agenda Identified by Provinces



Main Development Agenda of CFEZ



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Tourism Development Strategy

- Coordinated promotion as CFEZ
- Strengthening direct connectivity to/from CFEZ
- Improved mobility within CFEZ
- Distinction among destinations and tourism products in CFEZ
- Provision of high quality services for visitors

| _ | Ma | rket | Province | | | | | | |
|--------------------|-------|---------|------------------|------------------|------------------|------------------|------------------|--|--|
| Туре | Int'l | Dom'tic | Hue | Danang | Quang Nam | Quang Ngai | Binh Dinh | | |
| MICE ¹⁾ | А | А | 0 | ۲ | 0 | \bigtriangleup | \bigtriangleup | | |
| Eco-Tourism | В | А | 0 | 0 | ۲ | 0 | 0 | | |
| Beach Resort | А | А | 0 | 0 | 0 | 0 | 0 | | |
| Culture Tourism | А | А | ۲ | \bigtriangleup | 0 | 0 | 0 | | |
| Industrial Tourism | В | А | \bigtriangleup | 0 | \bigtriangleup | ۲ | \bigtriangleup | | |

1) Meeting/Incentives/Convention/Exhbition

Human Resource Development Strategies

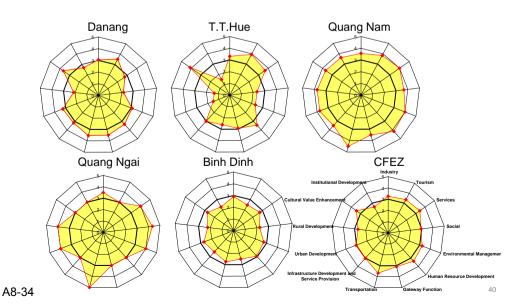
- To make CFEZ a national center for human resource development for services and knowledge industries through:
 - a) strengthening capacity of existing academic and vocational training institutions, interchange of information and people among them and integration with overseas institutions
 - b) establishment of high quality training institutions with focus on practical skills and knowledge on tourism, services, business support, ICT, environmental management, etc.
 - c) accommodation of students/trainees from all over the country as well as neighboring regions
- To provide high-quality manpower for strategic sectors of CFEZ (tourism, new industries, environmental management, etc.)

Economic Development Strategies

- Limited or moderate opportunities to attract conventional industries of foreign and domestic investments in CFEZ except Quang Ngai
- · Seek for strengthening agriculture sector (need farther study)
- Seek for development opportunities by new types of industries and business:
 - a) Environmental business (anti-pollution measures, clean energy, monitoring system, R&D,...)
 - b) Healthcare services
 - c) Human resource development (tourism, services, business support)
 - d) ICT (information and communication technology) business
- Danang needs to become a world class growth center with large urban concentration for high quality services and business activities

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Need for Interprovincial Coordination Identified by Provinces



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Need for further elaboration of specific types of industries/business and allocations in CFEZ

Possible Role-sharing among CFEZ Provinces for an Integrated CFEZ Development

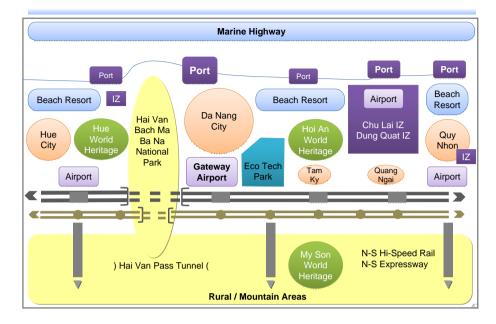
| Main Agenda | | T.T. Hue | Danang City | Quang Nam | Quang Ngai | Binh Dinh |
|------------------------------|---|----------|----------------|-----------|------------|-----------|
| Gateway F | unction | В | A | В | (A) | В |
| | Tourism | A | A | A | A | А |
| | Conventional Industry | В | В | В | A | В |
| | Services | А | A | В | А | A |
| Strategic Developm ent | New Business (health, education, environment) | В | Â | A | В | В |
| Themes | Human Resource Development | A | A | А | A | A |
| | Environmental management | A | А | A | A | A |
| | Cultural Value Enhancement | A | В | A | В | В |
| Urban Development | | А | A | А | А | A |
| Rural Development | | A | В | А | A | A |

Summary of Basic Development Strategies for CFEZ and Key Players

- ① Respond to existing demand and needs of communes (provinces)
- Attend to common issues among provinces in the region such as human resource development, capacity building, access to credit, etc. (CFEZ)
- Strengthen international access to market, information, technology and investment through expanded air and maritime transport and information system (CFEZ)
- Establish complementary role of the CFEZ lead by Danang in growth strategy rather than competing with NFEZ and SFEZ through new types of economic development opportunities (CG, CFEZ)
- Strengthen interprovincial coordination for strategic sector such as tourism, environment, transport, coastal management... (CFEZ, Provinces)

- Formulate step-wise comprehensive infrastructure development program for the region for external funding (CFEZ, CG)
- Leverage major national transport projects such as NSHSR, Expressway, etc. (CFEZ)
- Expand direct international air connection with main cities in Asia as well as international shipping services (CG, Danang)
- Exploit east-west corridor demand (CG, Hue, QN, BD)
- Strengthen telecommunication services (CFEZ, CG)
- Strengthen intra-regional connectivity through network development (Provinces)
- Promote industries (CFEZ, QN, 'QN)
- Expand tourism in coordination with provinces especially eco and culture tourism (CG, CFEZ, Provinces)
 Promote agricultural production matching potential of provinces (Provinces)
- Promote handicraft industry (CFEZ, Provinces)
- Promote private sector SMEs in commercial and service sector (CFEZ, Provinces)
- Exploit new types of industries such as human resource development, R&D, environmental business... (CG, CFEZ)

Main Components for Integrated Spatial Development of CFEZ



Conclusion: Integration and Role-sharing

| | ■ Spatial Integration : | international, national, provincial and local levels |
|---|--|--|
| | Sectoral Integration : | economic, social, environmental, urban-rural, infrastructure-service, |
| | Institutional Integration: | Central-local government, inter- provincial, inter-department, public-private, |
| • | Maximize potentials through "i capacity of and as the region | ntegration" to enlarge and strengthen |
| | | |

- "Appeal to the world" to promote investment (capital, technology, visitors)
- Provide more "active Central Government intervention" for takeoff before establishing sustainable growth

NEXT STEP

- Finalization of CFEZ development framework and strategies
- Formulation of Danang City Development Strategies and Master Plan
- Formulation of investment program for urban transportation and environment sectors of Danang City



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Danang People's Committee Japan International Cooperation Agency



4th Steering Committee Meeting on Integrated Development Strategy for Danang City and Its Neighboring Area (DaCRISS)

October 9th 2009 Danang City **JICA Study Team**

Main Points of Discussion

- Overall study progress
- Conclusion and recommendations on CFEZ development strategies
- Main issues facing Danang City
- Review of existing plans

| • Vision, Urban development | framework and strategies |
|-----------------------------|--------------------------|
|-----------------------------|--------------------------|

- Spatial development plan
- Transportation development plan
 Economic development
- Urban utilities development plan
- Master plan 2025
- GIS in urban planning process
- Strategic environmental assessment (SEA)

Environmental management

Next steps

Overall Progress of the Study

- Supplemental surveys
- Field Visits
- Meetings / Interviews
- Working Group Meetings
- Counterpart Team Meetings
- Situational Analysis
- Discussions on Long-term
 Development Strategies
- Development of Future Scenarios
- Project List
- Preparation of Interim Report

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|--------|---|---------------------|-----------------------|---|-------------------------------|--|
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| 30 | 2.4 Development Play Deviced Traced Discovery | logies for. Love | 24.5 | aning City Seenils | remond Strategics | |
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Supplemental Surveys

• Preparation of updated information:

On socio-economic activities and assessment of the people on existing conditions, problems, and future needs

- Household Interview Survey:
 5,000 households and their members residing in
 Danang City
- Commune Survey: A total of 792 communes located in Danang City and Thua Thien Hue, Quang Nam, Quang Ngai and Binh Dinh provinces
- Tourist Interview Survey:
 A total of 400 tourists interviewed at Danang
 Airport
- Establishment Survey: A total of 300 companies in Danang City
- Traffic/Transport Surveys

Interview surveys and traffic count

- Output ►
- Socio economic Databook
- GIS database
- Urban Karte
- Traffic / Transport database
- Others

Preliminary Conclusion on CFEZ Development Strategies

Possible Role-sharing among CFEZ Provinces for an Integrated CFEZ Development

| Main Agenda | | T.T. Hue | Danang City | Quang Nam | Quang Ngai | Binh Dinh |
|------------------------------|---|----------|----------------|-----------|------------|-----------|
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| Themes | Human Resource Development | A | A | A | A | A |
| | Environmental management | A | A | A | A | A |
| | Cultural Value Enhancement | A | В | A | В | В |
| Urban Development | | А | A | A | A | A |
| Rural Deve | lopment | A | В | A | A | A |

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- Exploit new types of industries such as human resource development, R&D, environmental business... (CG, CFEZ)

Note: CG=Central Government, QN=Quang Nam, 'QN=Quang Ngai, BD: Binh Dinh

Regional Role of Danang

- Danang to function as a strong socio economic and physical binder for north and south integration of the country
- Danang to play much bigger role to facilitate development and growth of CFEZ
- Danang to contribute to the development and growth of GMS through East West Corridor

Summary of Issues Facing Danang City

Social Development

- Issue: foundation for social development is not strong enough
- ✓ need to attend improvement of living conditions and urban services comprehensively
- ✓ need to establish a sustainable mechanism to supply adequate shelters/housing for low income group
- ✓ need to farther enhance public awareness on urban development and management

Main Issues and Challenges facing Danang City

□ Management of the Growth

- Issue: Potentials threat for urban sprawl
- $\checkmark \mbox{How to respond to constant increase in urban population}$
- $\checkmark {\rm How}$ to expand its role in the CFEZ and Vietnam
- ✓How to use available lands and space effectively without spoiling environmental value

Economic Development

- Issues: still too weak to play as a growth engine for CFEZ
- ✓Need to identify economic development strategies from those of NFEZ and SFEZ
- ✓Need to establish competitive investment environment (hardware, software and humanware) for all

Environment Management

- Issue: management of rich environment which can be both strength and threat is not effectively provided
- ✓ need to accelarate removing pollutions based on the exisiting Environment Plan
- ✓ need to strengthen preparedness and countermeasures against natural disasters
- ✓ need to integrate available environmental resources (natural and manmade, land and marine, water and green, landscape, etc.) to establish a foundation for urban development and activities.

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Urban Transportation

- Issue: no serious problems today but future is uncertain
- ✓ need to establish a firm policy on the development of efficient public transportation in integration with growth management strategies
- ✓ need to provide effective interface with interprovincial transport
- ✓ need to enhance public awareness on safety, traffic rules, and NMV (non-motorized vehicles) and pedestrians.

Urban Utilities

- Issue: situation has been constantly improving though it varies by area
- ✓ need to continue improvement of facilities and services for power-supply, water supply, waste water treatement, solid waste management
- ✓ particular needs are voiced by the people to improve water quality, provide more public toilets in parks and areas near water bodies and along main roads, as well as to improve drainage conditions.

River Management

- Issue: efforts at fully implementing integrated water resource management (IWRM) has been dulled
- ✓ need to satisfy water demand of Danang and Quang Nam using supply of raw water from Vu Gia – Thu Bon river basin
- ✓ impact of extensive hydropower development upstream on downstream water users
- ✓management of impacts of natural disasters
- ✓ sharing of responsibilities for ground water protection✓ others

Coastal Management

- Issue: integrated coastal zone management (ICZM) must be strengthened
- ✓ Need to maintain rich marine ecosystem
- ✓ Rapid urbanization and industrialization
- ✓Pollution of river basins

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Tourism

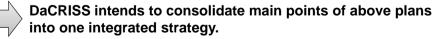
- Issue: large potentials which can only be tapped through regional coordination, especially with Hue and Quang Nam
- ✓ Need to establish competitive strategies at regional levels in synergy of related provinces with specific rolesharing
- ✓ Need to integrate tourism strategically with overall urban planning and development
- ✓ Need to enhance human resource development for tourism sector

Municipal Finance

- Issue: the city raises a lot of fund from landuse conversion. Will it be sustainable?
- ✓ need to manage lands more effectively
- ✓ need to expand city revenue sources
- \checkmark need to encourage private sector involvement

Review of Existing Plans

- Socio-economic Development Plan 2006 2010
- Socio-economic Development Master Plan upto 2020
- Danang City Master Plan (Construction Plan)
- Danang City Land Use Plan 2006 2010
- Danang Environment City Development Plan



Formulation of Master Plan 2025

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Vision and Goals

Danang to be an Internationally Competitive Environmental City Beyond being Pollution-free

- ◄ Images of Future Danang City ►
- No pollution (air, water, soil)
- Prepared for natural and man made disasters
- Ecosystems and culture are preserved
- Socio economic activities involve small load on environment
- People's awareness on environment is high
- Green business takes a lead of economic growth

- Outcome of Environmental City
- ① Safety & Security ensured
- 2 Ecological stability ensured
- ③ Amenity in urban area provided
- ④ Reduced poverty and powerful economy promoted

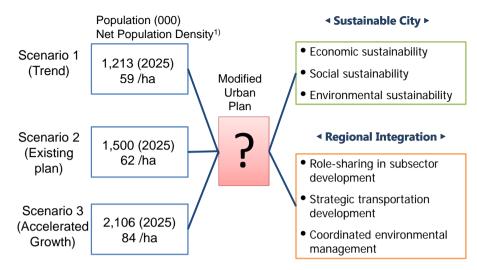
21

- 5 Cultural valued preserved
- 6 Hospitable people in place
- Creating strong identity and appealing image
- Satisfying regional roles of CFEZ, National and GMS levels

Comparison of Alternative Scenarios

| | | Scenario 1 : Trend Growth | Scenario 2 : Current Plan | Scenario 3: Accelerated Growth | |
|----------------|---|--|------------------------------|--|--|
| | Population (000) | 1,213 (2025) | 1,500 (2025) | 2,100 (2025) | |
| Profile | Land Suitable for Development (ha) ¹⁾ | approximately 25,000 ha | | | |
| | Population Density (persons/ha) ²⁾ | 59 | 62 | 84 | |
| Sustainability | Economic: • Industry mix level • Investment attractiveness • Impact on the region | Low: • Ineffective land use • Investment attractiveness decreased • Little positive impact on the region | Moderate: | High: • Modern compact CBD and subcenters • Strategic locations for new industries • Strengthened integration with adjoining provinces | |
| | Social: • Inequality • Employment • Access to services | Low: • Employment opportunity limited • Living conditions may deteriorate | Moderate: | Moderate to High: • Expanded human resource development • Improved accessibility to services • Neighborhood community strengthened | |
| | Environment • Pollution level • Preserved ecosystem • Disaster preparedness | Low: • Pollution spread • Ecosystem negatively affected • Vulnerability worsen | Moderate to High: | Moderate to High: • Pollution free • Ecosystem preserved • Amenity improved | |

Urban Growth Scenario to be Considered in DaCRISS



¹⁾ Net area refers to urban areas and other areas suitable for various types of development. It is calculated based on a development suitability analysis which excludes areas vulnerable to erosion, rivers and lakes, forest land, transportation land, cemeteries, military land, and areas that need special protection such as natural habitats, coral reefs, etc. 22

Socio-economic Development Framework 2025

| | | | 2007 | 2025 | Growth | n (07-25) |
|----------------------------------|--------------------------|--------------|--------------|---------------------|-----------|------------|
| | | | 2007 | 2025 | Ratio | % / yr |
| Demulations 000 | Total | Total | | 2,100 ²⁾ | 2.6 | 5. |
| Population: 000 | Productive ¹⁾ | | 528 | 1,160 | 2.2 | 4. |
| Hausahalda | Total No.: 00 | 00 | 204 | 656 ~ 840 | 3.2 ~ 4.1 | 6.7 ~ 8. |
| Households Ave. Size | | | 4.0 | 2.5 ~ 3.2 | 0.6 ~ 0.8 | -2.6 ~ -1. |
| | Primary | | 40 (11) | 18 (2) | 0.5 | -4. |
| Employments 000(0/) | Secondary | | 98 (26) | 198 (24) | 2.0 | 4. |
| Employment: 000(%) | Tertiary | | 238 (63) | 611 (74) | 2.6 | 5. |
| | Total | | 374 (100) | 826 (100) | 2.2 | 4. |
| | Primary | | 50 (24) | 144 (32) | 2.9 | 6. |
| Students 000(0() | Secondary | | 116 (56) | 224 (50) | 2.1 | 3. |
| Student: 000(%) | Tertiary | | 42 (20) | 78 (18) | 1.9 | 3. |
| | Total | | 209 (100) | 486 (100) | 2.3 | 4. |
| | Primary | | 597 (4) | 922 (1) | 1.5 | 2. |
| | Secondary | | 6713 (44) | 28,876 (17) | 4.3 | 8. |
| GRDP: VND Billion (%) | Tertiary | | 7797 (52) | 138,201 (82) | 17.7 | 17. |
| | Total | | 15,107 (100) | 168,000 (100) | 11.1 | 14. |
| GRDP / capita: VND million (USD) | | 18.7 (1,100) | 80.0 (4,705) | 4.3 | 8. | |
| Vehicle Owners | hip | Car | 1.5 | 69.9 | 46.6 | 23. |
| (% of househo | ld) | Motorcycle | 90.1 | 23.2 | 0.3 | -7. |

Source: 2007 figures from GSO, 2007 and DaCRISS HIS, 2008

1) assumed age group for productive population is 15 – 59 years old for male and 15 – 54 years old for female

2) the total population for 2025 will be explained further in Chapter 6

A8-42

Key Elements for Spatial Plan

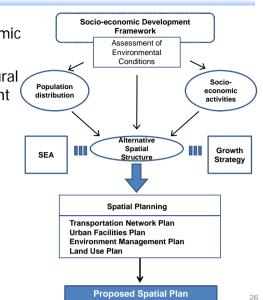
- Preparedness for farther growth of the city
- Preserved natural environment and preparedness for natural disasters
- Compact city through transit oriented development
- Competitive CBD and urban centers
- Green network (green and water)
- Livable communities with medium to high population density



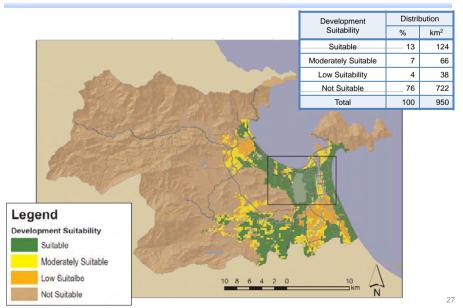
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Spatial Development

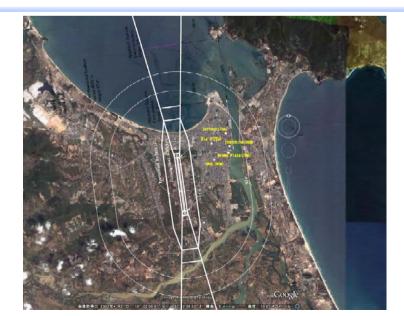
- Integration of socio-economic development framework
- Critical assessment of natural conditions and development orientation
- Assessment of alternative spatial structure
- Conditions of national/regional transport projects and activities



Critical Assessment of Natural Conditions



A Restriction to Urban Developments due to Airport



A8-43

Alternative Sites for Danang Airports (Tentative)



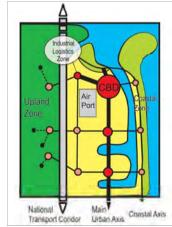
Danang – Quang Ngai Expressway Project

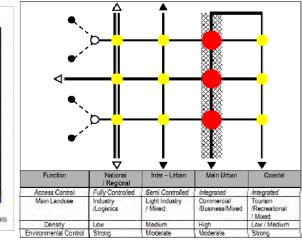


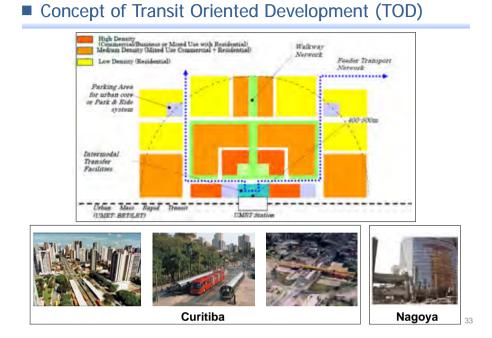
Danang – Hue Section of the North – South High – Speed Railway



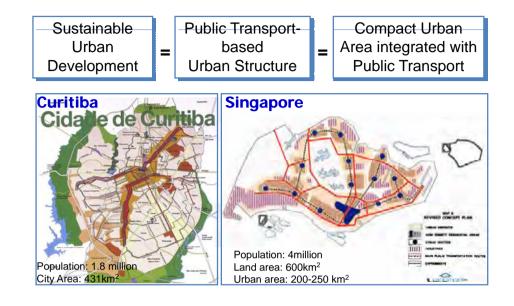
Proposed Basic Urban Structure



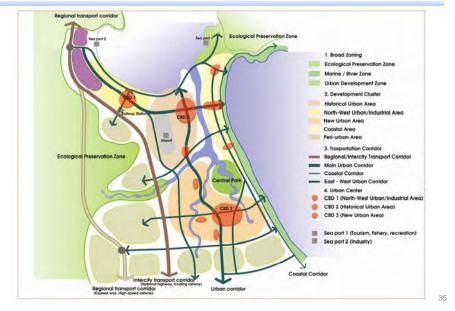




Examples of Good Practices



Concept of the Spatial Structure of Danang City



Draft General Plan



Land Use Classification

| | Subzone | LEGEND | | | | | |
|---|--|--|--|--|--|--|--|
| Class I: Rural | 1-1 Agricultural Land | LANDUSE ZONE | ENVIRONMENT PROTECTION ZONES | | | | |
| | 1-2 Rural Residential | Class I Rural | Ney Nervick Instant Control Area Sportal Section of Management Area Landscape Control Area KEY FACILITIES | | | | |
| | 1-3 Rural Service Center | Agricultural Land Rural Residential | | | | | |
| Class II: | 2-1 Low - Rise Residential | Class-Il Residential | Expressiony Primary Roat | | | | |
| Residential Class III: Commercial and Business | 2-2 Medium - Rise Residential | Low the Residential Medium rice Residential | Scientisty Road | | | | |
| | 2-3 High - Rise Residential | High-rise Residential Urban Wilage | - intercety itanimay | | | | |
| | 2-4 Urban Village | Mixed Use Residential Class & Commercial & Business Commercial and Business Center | Commercy The Depot / Wichshop / Plant Vien CV Conclamin Part MP National Part PP Passenger Port W Water Supply Plant S Severager Orainage Treament Plant ICBT Inter-City Bus Terminal | | | | |
| | 2-5 Mixed use Residential | | | | | | |
| | 3-1 Commercial and Business Center | Contdor Commercial District Commercial | | | | | |
| | 3-2 Corridor Commercial | Class-IV Public Use | | | | | |
| Baomoco | 3-3 District Commercial | Government Center | SWDP Solid Waste Disposal Site SWTS Solid Waste Transfer Station | | | | |
| | 3-4 Existing Center | Higher Education | CC Logistic Contact OTHERS | | | | |
| Class IV: Public Use | 4-1 Institution and Special Public Use | Airport Key Land Transport Facilities Key Inland Water Port | Provincial Blandary District Blandary Urbar Orowth Boundary | | | | |
| Class V: | 5-1 Industrial Park | Key Utility Plants Class V Insushial | Figure Expansion of UDA wher 2020 | | | | |
| Industrial | 5-2 Light Industrial Area | Light Industrial Parts | Environmental Gutter Zone | | | | |
| | 5-3 Quasi Industrial Area | Cussi-Industrial Cuss-VI Great And Upon Spata | - Administrative Boardary | | | | |
| Class VI: Green and Open Space | 6-1 Park and green space | Park and green spare | | | | | |
| | 6-2 Tourism and Recreation | Toterton and Rectamion | | | | | |

Economic Development

- Basic Orientation: Shift to knowledge based and environment business/industry
- ✓ develop cutting-edge strategic industries (environmental business, higher education, health care industries, services)
- ✓ expand tourism development in coordination with adjoining provinces
- ✓ promote locations of conventional types of manufacturing industries in coordinatin with adjoining provinces
- ✓ promote local SMEs and informal industries

City Development Strategies

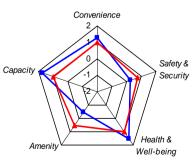
Overall Growth Strategy

- Responsibility of Danang to take a lead of sustainable growth of CFEZ and Vietnam as well as GMS
- Need for different growth strategy from those of NFEZ and SFEZ based on strength (rich natural and cultural resources, Danang University) and by overcoming weakness (small market, poor infrastructure) and threats (natural disasters)
- Maximize opportunities by strenthening connectivity with the world through air transport and information system

Social Development

- Basic Orientation: Ensuring adequate living conditions for all
- ✓ provide improved basic services and safety net to the citizens
- ✓ empower community initiatives to attend local issues effectively
- ✓ prepare for accelerating immigration of the people

Example of Asessment of Living Conditions by Urban Karte (Binh Hien Commune)



Objective Assessment Score ____ Subjective Assessment Score

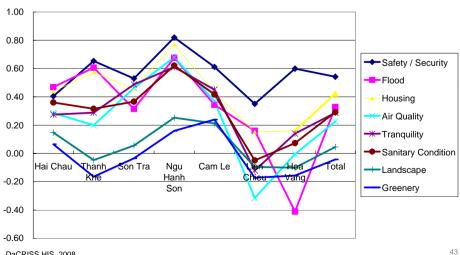
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Living Conditions (assessment based on HIS)

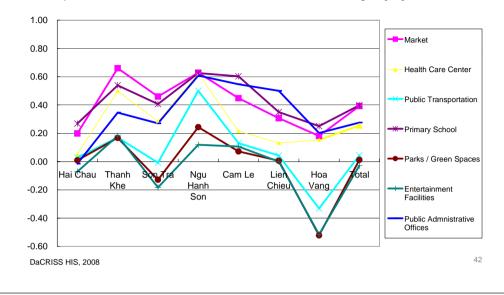
1.20 1.00 0.80 -Power Supply 0.60 0.40 Gas Supply 0.20 0.00 - Telecom Hai Chau Thanh Son Tra Ngu Cam Le Lien HMa Total -0.20 Khe Hanh Chieu Vana Son Collection -0.40 -0.60 -0.80 41 DaCRISS HIS, 2008

• People's Assessment of Utilities in Danang City by District, 2008



• People's Assessment of the Living Conditions in Danang City by District, 2008

People's Assessment of Access to Urban Services in Danang City by District, 2008



Human Resource Development

- Basic Orientation: Danang to become a national centre for human resource development for services, environmental business and knowledge industries
- ✓ expand and upgrade higher education;
- ✓ strengthen vocational training in compliance with sector development strategies; and
- ✓ expand interchange of human resources at national and international levels.

Municipal Finance Capacity Development

- Basic Orientation: Need for expanding funding sources
- ✓ expand own funding sources
- ✓ expand users-pay principle for urban services
- ✓ introduce PPP schemes
- ✓ expand Central Government transfer and ODA
- ✓ issue municipal bond

Transportation Development

- Basic Orientation: Urban transportation is the core component of promoting compact and sustainable urban development
- ✓ establish effective interface between urban and regional transport
- ✓ develop attractive public transport system integrated with urban development
- ✓ develop effective roads system in integration with land use
- ✓ strengthen traffic management system for efficient and sale movement of passenger and freight
- ✓ develop water transport services

- Basic Orientation: To contribute to establishing a safe, healthy and convenient living conditions for all
- develop efficient and effective supply network and facilities including water supply, power, telecommunications, drainage and sewerage, solid waste management, etc.
- ✓ improve operation and management mechanism
- ✓ promote user-paying principle / awareness for saving consumption

Environmental Management

 Basic Orientation: Place "environment" as a core component in each subsector

| | Examples of Environments | ental Components in Subsector |
|---|--------------------------|--|
| | Sector | Environmental Implication |
| • | Spatial development | Compact City |
| | Landuse | Environmental ZoningDevelopment Suitability |
| | Economic | Green businessR&D on environment technologies |
| | Social | Awareness campaignCommunity education |
| | Transportation | Public transport developmentGreening of vehicles |
| | Utilities | 3R Renewable energy |
| | Human resource dev. | Environmental education |
| | Tourism | • Eco – tourism |
| | Finance | • CDM • Carbon tax |
| | Environment | Decontamination Disaster prevention Preservation |

Evenuelas of Environmental Commencets in Cuber

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Administration Capacity Development

- Basic Orientation: Strengthen administrative capacity for effective urban management at all levels
- Strengthen planning capacity and institutional framework for urban development and management; and
- ✓ Establish effective public participation mechanism in urban planning, development and monitoring process.



Summary of Candidate Projects by Subsector

| Sector | No. of Projects by Source ¹⁾ | | | No. of Projects by Implementing Body ²⁾ | | | Total |
|--|---|---------|---|---|-----|---------|-------|
| | Danang City | | | Govern -ment | PFI | Private | |
| Economic Development | 19 | 5 | 0 | 4 | 2 | 18 | 24 |
| Social Development | 40 | 2 | 0 | 20 | 18 | 4 | 42 |
| Environmental Management | 32 | 34 (14) | 0 | 61 | 5 | 0 | 66 |
| Spatial Development | 10 | 14 | 0 | 18 | 6 | 0 | 24 |
| Housing and Living Conditions Environment | 0 | 3 | 0 | 3 | 0 | 0 | 3 |
| Transportation Development | 27 | 26 (1) | 0 | 51 | 2 | 0 | 53 |
| Urban Infrastructure and Utilities Development | 23 | 24 (1) | 3 | 49 | 1 | 0 | 50 |
| Human Resource Development | 7 | 1 | 0 | 5 | 3 | 0 | 8 |
| Municipal Finance Capacity Development and Management | | 3 | 0 | 3 | 0 | 0 | 3 |
| Administrative Capacity Development | 1 | 10 | 0 | 11 | 0 | 0 | 11 |
| Tourism Development | 32 | 8 (4) | 0 | 3 | 7 | 30 | 40 |
| Total | 195 | 131 | 3 | 228 | 44 | 52 | 324 |

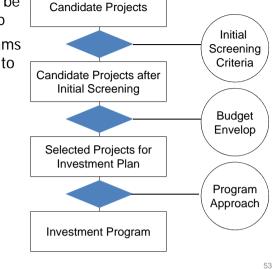
The numbers in brackets show the projects which are originally projects proposed by Danang City but elaborated further in DaCRISS.
 The projects are categorized by the type of implementing agency (PFI is private finance initiative).

Criteria for Project Evaluation

| Scope | Main Criteria | | Scoring | |
|------------------|--|--------------------|---------|-----------|
| | | Affirmative | Neutral | Negative |
| | | Impact | | Impact |
| | | Highly Insignifica | nt | |
| | | Significant | | |
| | | (5) 🔶 (1) | (0) | (-1) 🔶 (- |
| A.Overall Policy | Compliance to overall city | | | |
| | development policy | | | |
| | Enhancement of city image and | | | |
| | identity | | | |
| | Contribution to climate change | | | |
| B.Economic | Contribution to city's economic | | | |
| | growth | | | |
| | Cost-effectiveness | | | |
| | Increase in employment | | | |
| | opportunities | | | |
| C.Social | Reduction in poverty | | | |
| | Impact on resettlement | | | |
| | Improvement of living environment | | | |
| D.Environmental | Removal / reduction in pollutions | | | |
| | Preservation of natural environment | | | |
| | Prevention of natural disasters | | | |
| E.Implementation | Maturity of projects including funding | | | |
| and | Availability of implementing | | | |
| Management | mechanism | | | |
| | Urgency of projects / actions | | | |

Formulation of Investment Program

- Investment program will be prepared in the next step
- For key projects / programs profiles will be prepared to more toward next step



Danning Tools developed in DaCRISS GIS (initial) Urban Karte for comprehensive assessment of living conditions at commune level Assessment of natural conditions to define suitable areas for development and critical areas for environmental preservation STRADA based urban transportation demand and network analysis Others

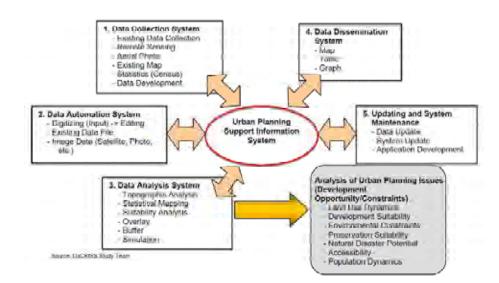
Key Issues in Developing GIS

- Objective and coverage of GIS and users
- Development and update of database
- Sharing of database
- Utilization of GIS for planning work
- Required skill and qualification of users
- Management of GIS

DaCRISS prepared initial GIS for urban planning which can provide a basis for farther discussion on developing appropriate GIS for Danang City



GIS Database developed in DaCRISS

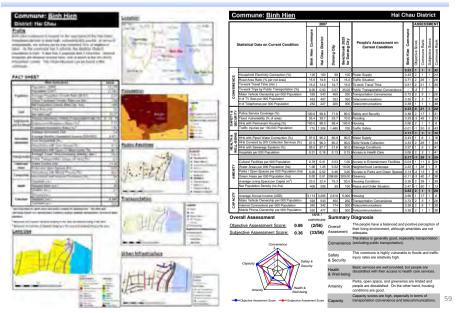


Utilization of DaCRISS GIS Database

| Category Contents of Data Base Map Outline of the city boundary and basic items which consists the topographic condition of the city | | Utilization | Responsible Agency for Data Update DONRE, DOT, DARD. DOC | |
|--|--|---|---|--|
| | | This data can be utilized to see the jurisdictional area and topographical condition of the target area. | | |
| Urban Planning Tools | Socio-economic condition, assessment of natural environmental condition, transportation system, land use, development suitability analysis | natural environmental condition, nsportation system, land use, conditions and natural environmental | | |
| Urban Utilities | Water supply network, drainage and sewerage network, electricity network, dumping site | This data can be utilized to know the spatial distribution of the urban facilities. | DOT, DOC, DOIT, DONRE | |
| Public Facilities | Facilities Various public facilities (administrative, educational, medical, recreational, religious) This data can be utilized to know the spatial distribution of the public facilities and to manage the current condition of the facilities. | | DOC, DOIC, DOCST, DOH, DOET, DOIT | |
| Master Plan | DOC Maser Plan, on-going construction projects | This data shows the current master plan prepared by DOC and on-going construction projects by the Departments of Danang City or Government. | DOC, all Departments | |

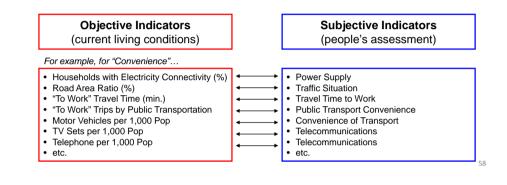
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Example of Urban Karte



Urban Karte

- A set of indicators were selected based on 5 living condition evaluation factors (Convenience, Safety / Security, Health / Wellbeing, Amenity, Capability)
- For each set of indicators, objective indicators and subjective indicators (mainly the people's assessment based on the results from the Household Interview Survey done in August to October 2008).



DaCRISS Atlas

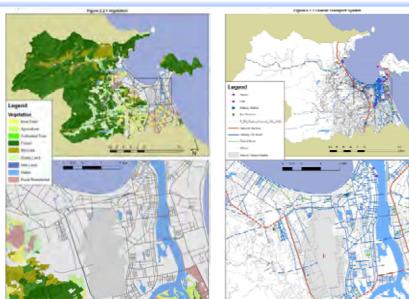
Objective

• Thematic maps prepared in DaCRISS Study has been organized in to DaCRISS Atlas, an A3 size booklet, to see the output map by hands.

Outline

- DaCRISS Atlas has been classified into five categories;
- (A) <u>Base Map</u>: to see the administrative area and topographical condition of the City
- (B) <u>Urban Planning Tools</u>: to know the spatial distribution of urban planning issues, such as socio-economic conditions, natural conditions, environmental management, hazard/risk records, existing urban land use, urban transportation, and development suitability
- (C) <u>Urban Utilities</u>: to know the spatial distribution and manage the utilities
- (D) <u>Public Facilities</u>: to know the spatial distribution and manage the facilities
- (E) <u>Master Plan</u>: to know the spatial distribution of the current master plan and construction projects

Example of DaCRISS Atlas



Strategic Environmental Assessment (SEA)

Definition

"SEA is the analysis and prediction of potential environmental impacts of development strategy and project planning prior to approval, in order to ensure the achievement of sustainable development"

Implementing Body of SEA: Environment Technology Centre (ENTEC)

Process

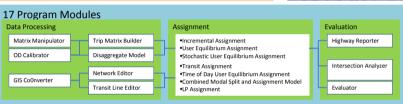
- First SEA meeting in April 2009 with participation of government officials, professors and experts of related fields, as well as those of Fatherland Front Union, Science and Technology Association, Association of Conservation of Nature and Environment.
- Stakeholder meetings were held in August 2009 with the participation of the above as well as representatives of Districts and private enterprises.

STRADA

- STRADA is a package of a number of programs for transport demand forecast that are operated on the Windows.
- First version of STRADA was developed in 1997 by JICA to provide a common tool of transport planning and to build up common database thereof, for its technical assistance program in the transport sector for developing countries.

Features

- Multi-lingual operation
- Enhanced ease of editing by commercial applications
- Improved convertibility of GIS data
- Increased availability of models for demand forecast
- Increased model for evaluation



Assessment of Alternative Scenarios

| | Items | Scenario 1 (Trend Growth) | Scenario 2 (Current Plan) | Scenario 3 (Accelerated Growth |
|-----------------------|---|------------------------------|------------------------------|-----------------------------------|
| | Air Quality | В | В | E |
| | Noise and Vibration | D | D | D |
| | Water Quality (groundwater and surface water) | В | E | E |
| Pollution | Soil | - | - | - |
| | Wastewater | В | E | E |
| | Solid Waste | В | E | E |
| | Coastal Area | С | С | C |
| | Forest Conservation & Management | С | С | С |
| Natural | Flora and Fauna (Biodiversity) | С | С | С |
| Environment | Ecosystem | В | С | C |
| | Global Warming | В | В | E |
| | Involuntary Resettlement | В | В | A |
| | Regional Severance & Community Dividend | - | - | - |
| | Socially Vulnerable Group (poverty, indigenous & ethnic) | В | E | E |
| | Cultural & Historical Heritage (cultural & historical assets) | - | E | E |
| | Landscape | Α | Α | E |
| | Greenery, Park & Open Space | Α | E | E |
| . | Healthcare & Public Health (Hygiene) | С | С | С |
| Social Environment | Living Environment | В | С | E |
| Environment | Safe & Security (crime, disaster management, etc) | С | E | E |
| | Local Economy (commercial business) | С | + | + |
| | Existing Social Infrastructure & Social Services | С | + | + |
| | Uneven Distribution of Benefit & Damage | - | - | - |
| | Offensive Odor | - | - | - |
| | Accidents | В | В | + |
| | Other Social Issues (social stability, inequality, etc) | - | - | - |
| Overall Evalua | tion | V | VV | VV |

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A: Most significant impact - - - > E: Small impact, +: Positive impact, -: No impact V: Negative impact, VV: Negative impact to some extent, VVV: No negative impact

Identified Main Concerns

- Involuntary resettlement due to land acquisition
- Water pollution due to untreated wastewater discharge
- Ambient air pollution due to increase of vehicles
- Ill effects to forestry and biodiversity

NEXT STEP

- Finalize the draft Master Plan based on the discussion held and comments made in the Steering Committee on the Interim Report.
- Finalize draft program for urban transport, environmental sectors, as well as implementation plan.
- Consolidate the results of the Study in Draft Final Report for discussions in the next Steering Committee.
- Conduct a short training course on main planning tools.
- Conduct a supplemental study on tourism development for CFEZ.

Suggested Approach to Additional Study on Tourism Sector Development in CFEZ

- Objective: to formulate an integrated strategy and program for tourism development in CFEZ
- Scope: •review of JICA Study on Tourism Development in the Central Region of Vietnam (2002)

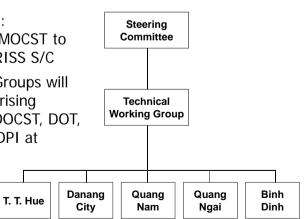
•review of existing tourism sector plans and projects at central and provincial levels

•consolidate projects/actions into an integrated/coordinated project packages

- Study Area: Danang City and adjoining provinces including
 T. T. Hue, Quang Nam, Quang Ngai and Binh Dinh
- Study Period: Till June 2010 (Submission of Final Report)

Study Organization

- Steering Committee: a representative of MOCST to be included in DaCRISS S/C
- Technical Working Groups will be organized, comprising representatives of DOCST, DOT, DOC, DONRE, and DPI at provincial level



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