

THE SOCIALIST REPUBLIC OF VIETNAM



**Ministry of Agriculture
and Rural Development of Vietnam (MARD)**

1st GENERAL NARBO MEETING

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**RIVER BASIN ORGANIZATION IN VIETNAM
AND ITS CONTRIBUTION TO WATER RESOURCES
DEVELOPMENT IN THE FUTURE**

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Presented by M.E Le Quang Tuan – General Office of River Basin Organisations in Vietnam

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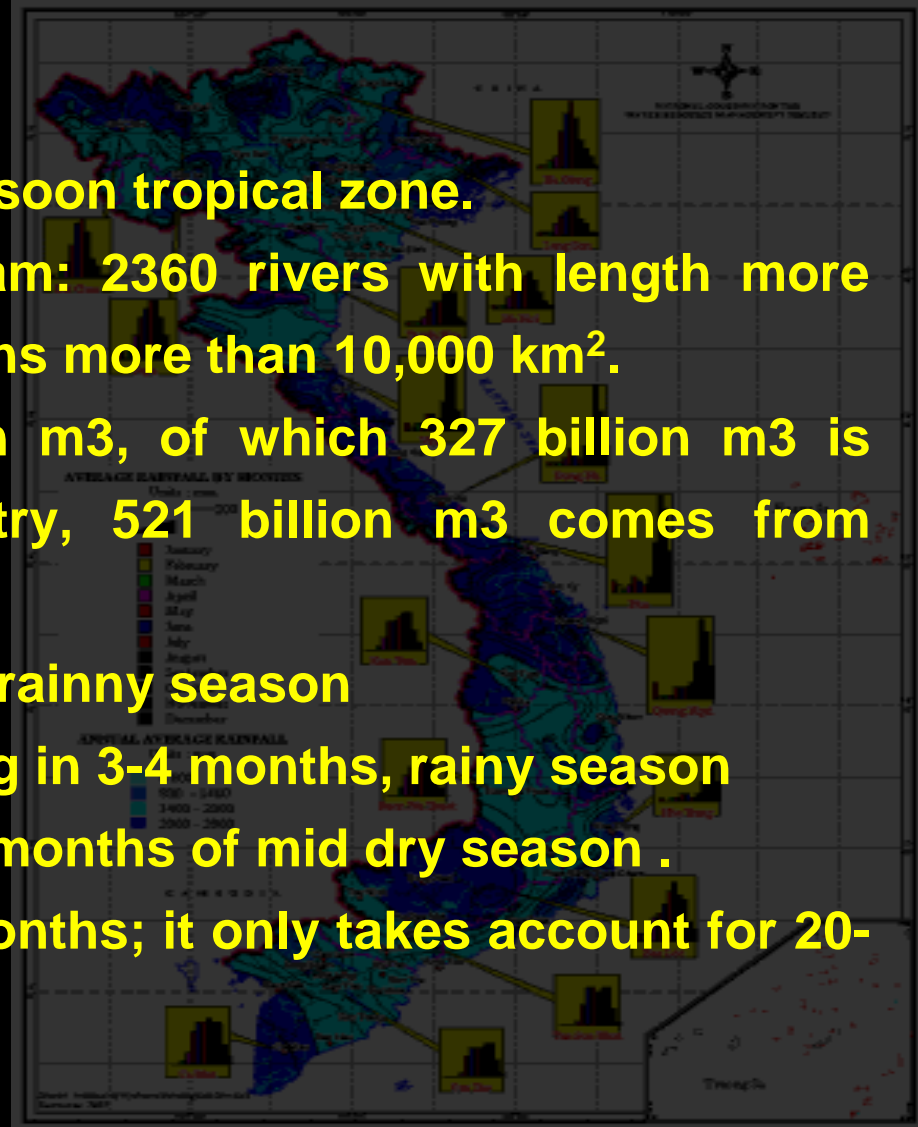
**II. OVERVIEW ON SUCCESSES AND CONSTRAINTS IN
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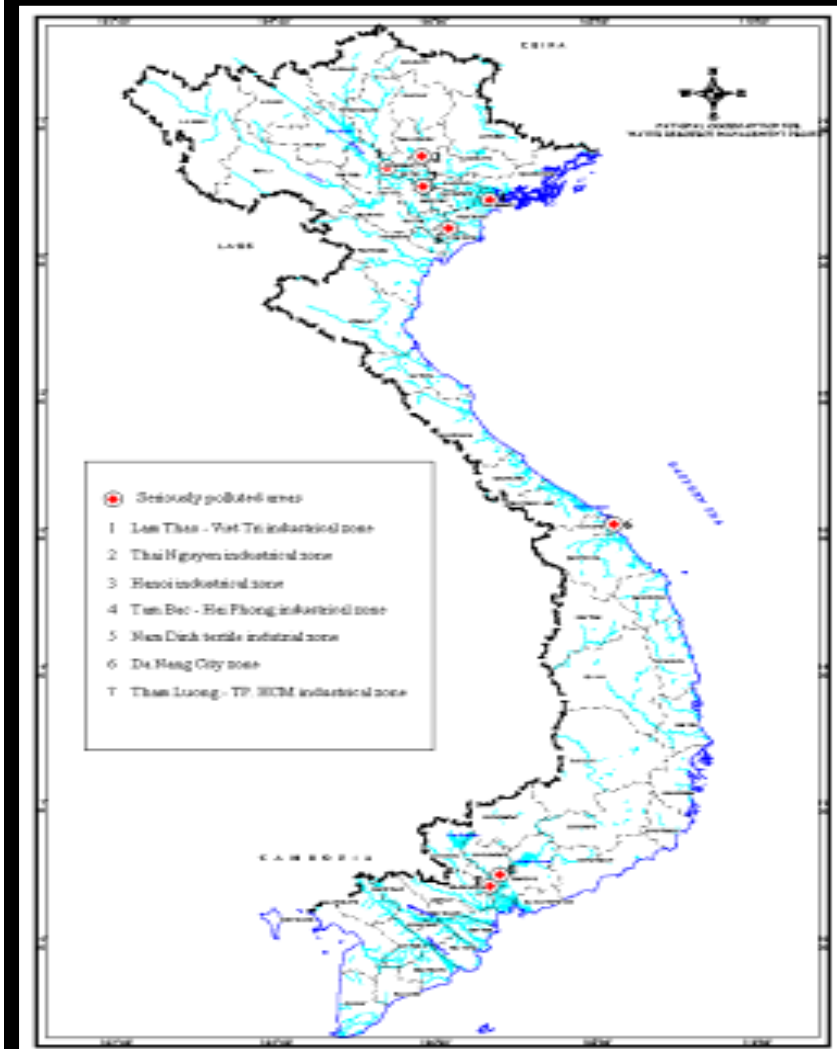
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I. Background (1)

- Vietnam is located in a monsoon tropical zone.
- The river system in Vietnam: 2360 rivers with length more than 10 km , 10 big river basins more than 10,000 km².
- Annual runoff : 848 billion m³, of which 327 billion m³ is generated within the country, 521 billion m³ comes from overseas countries.
- 70-80% yearly water flow in rainy season
- Annual flow is concentrating in 3-4 months, rainy season
- The surface flow is 5-8%, 3 months of mid dry season .
- Dry season is lasting 6-7 months; it only takes account for 20-30%.



Seriously Polluted Areas



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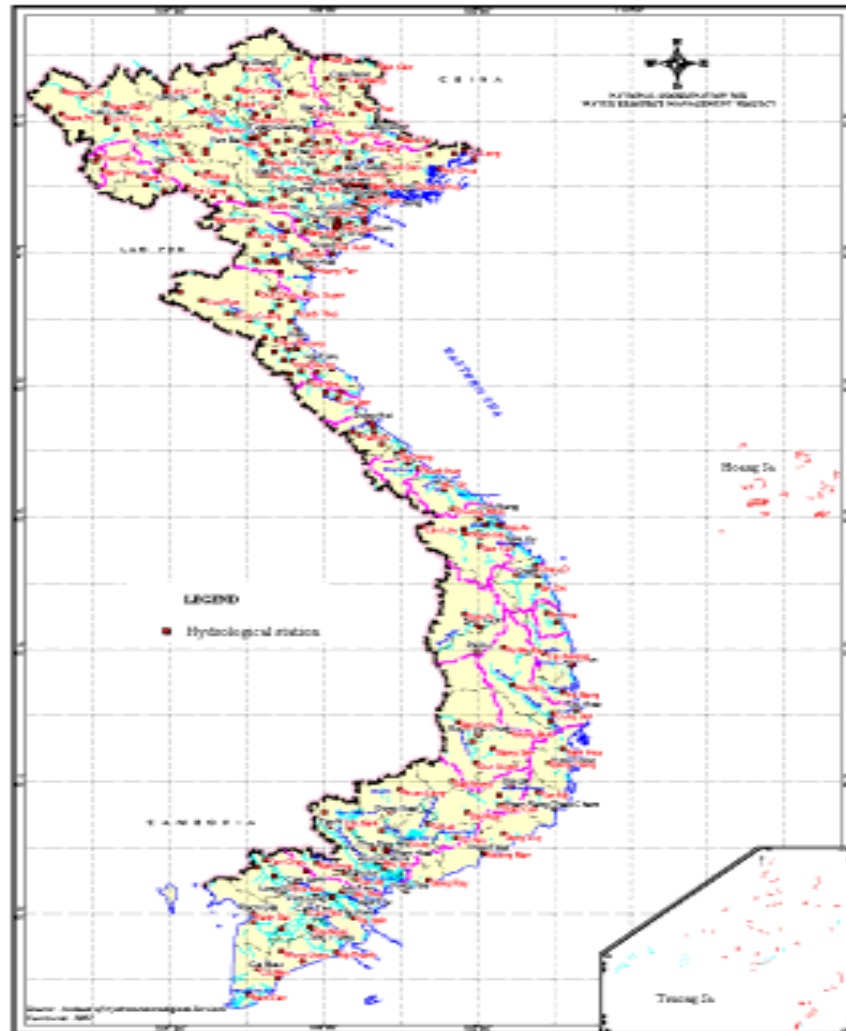
Major River Basin



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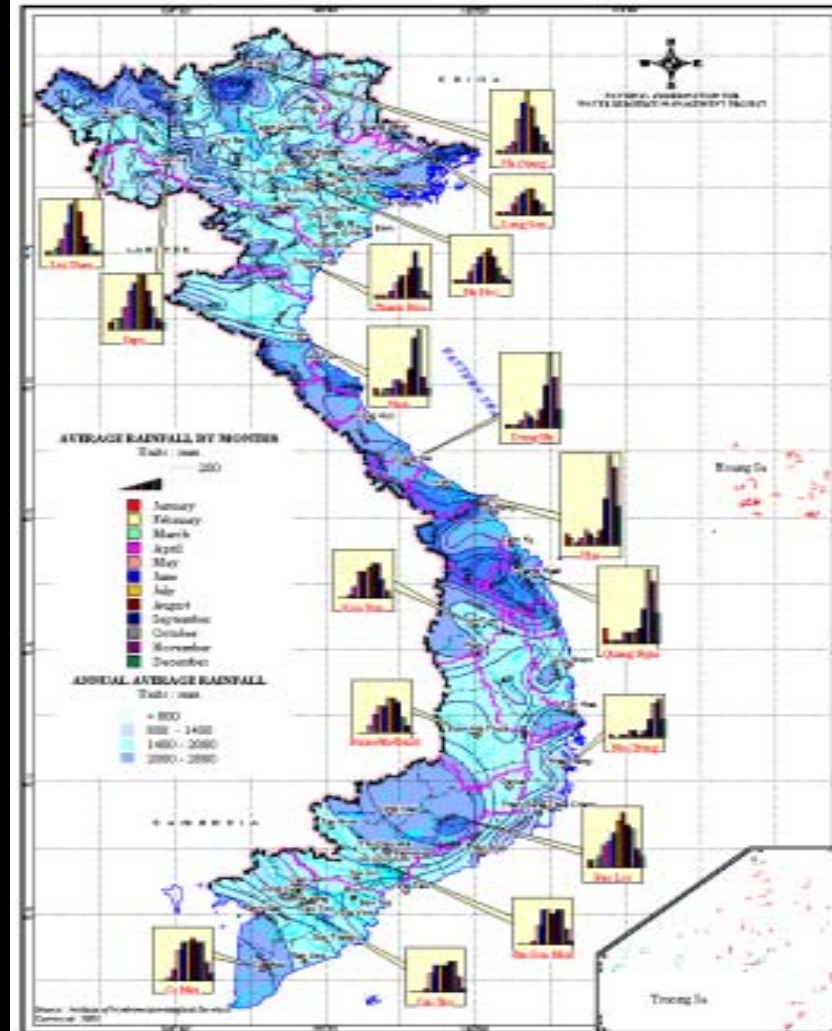
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Meteorological Stations



Back to slide : Water resources

Annual Average Rainfall



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I. Background (2)

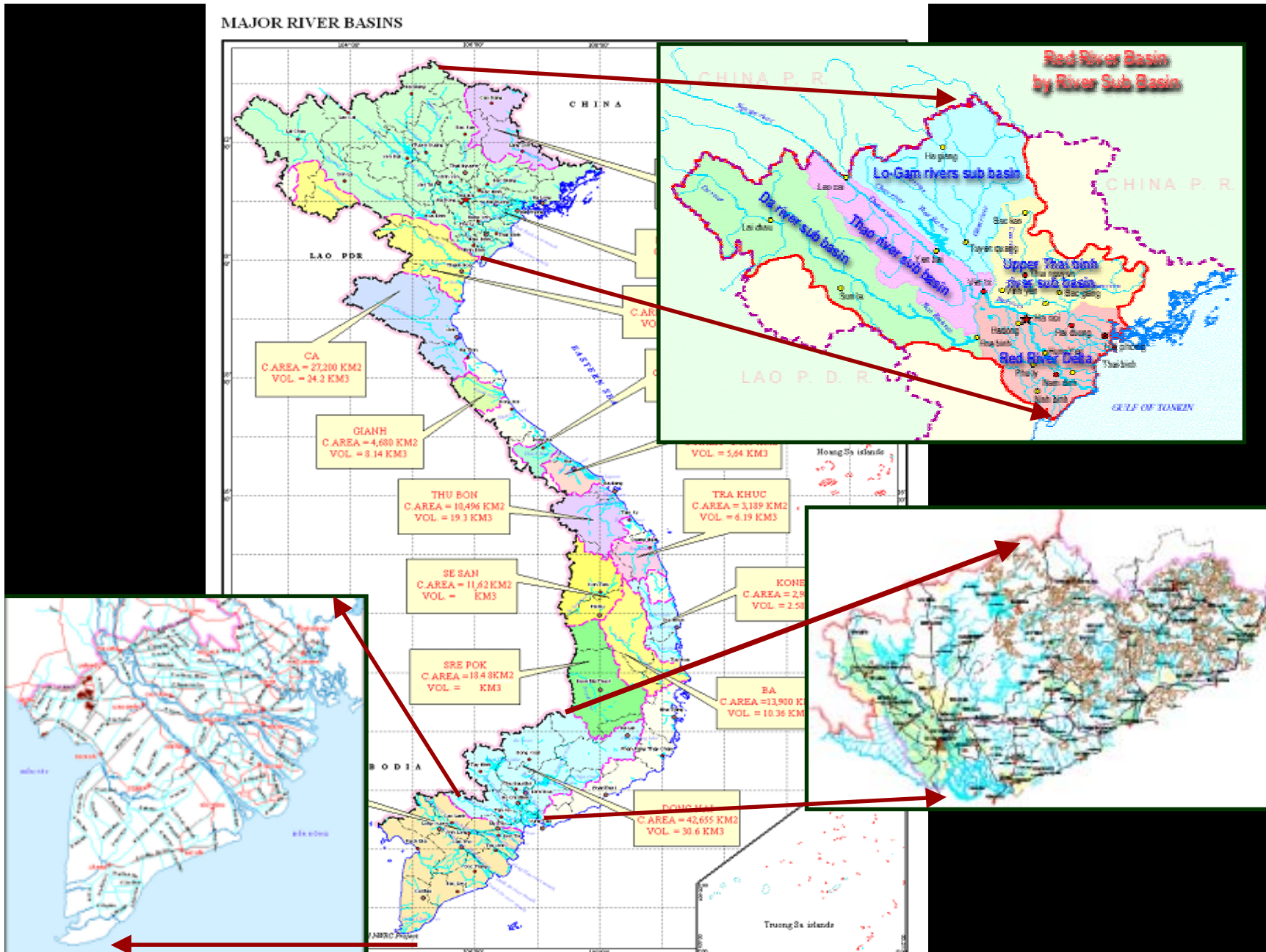
At present, water demands are very diversified:

- The main consumptive water uses are agriculture (irrigation and animal husbandry, accounting for more than 80% of total water use),
- Other demands:
 - ✓ Industry (such as food processing, light and heavy industry, accounting now for more than 15% of water use) and rural and urban domestic water supply (accounting for less than 4%).
 - ✓ Cultivation, animal husbandry, fishery and traditional professional villages.
- Flood control, water pollution protection and ecological system conservation are also very essential.

I. Background (3)

- The National Assembly of Vietnam has issued the Law on Water Resources and it come into effect on 1st Jan, 1999.
- Since the Law enacted, some organization have been established such as National Water Resources Council (NWRC), River Basin Planning Board (RBO) of three biggest river basins such as Red-Thai Binh, Dong Nai and Cuu Long.

MAJOR RIVER BASINS

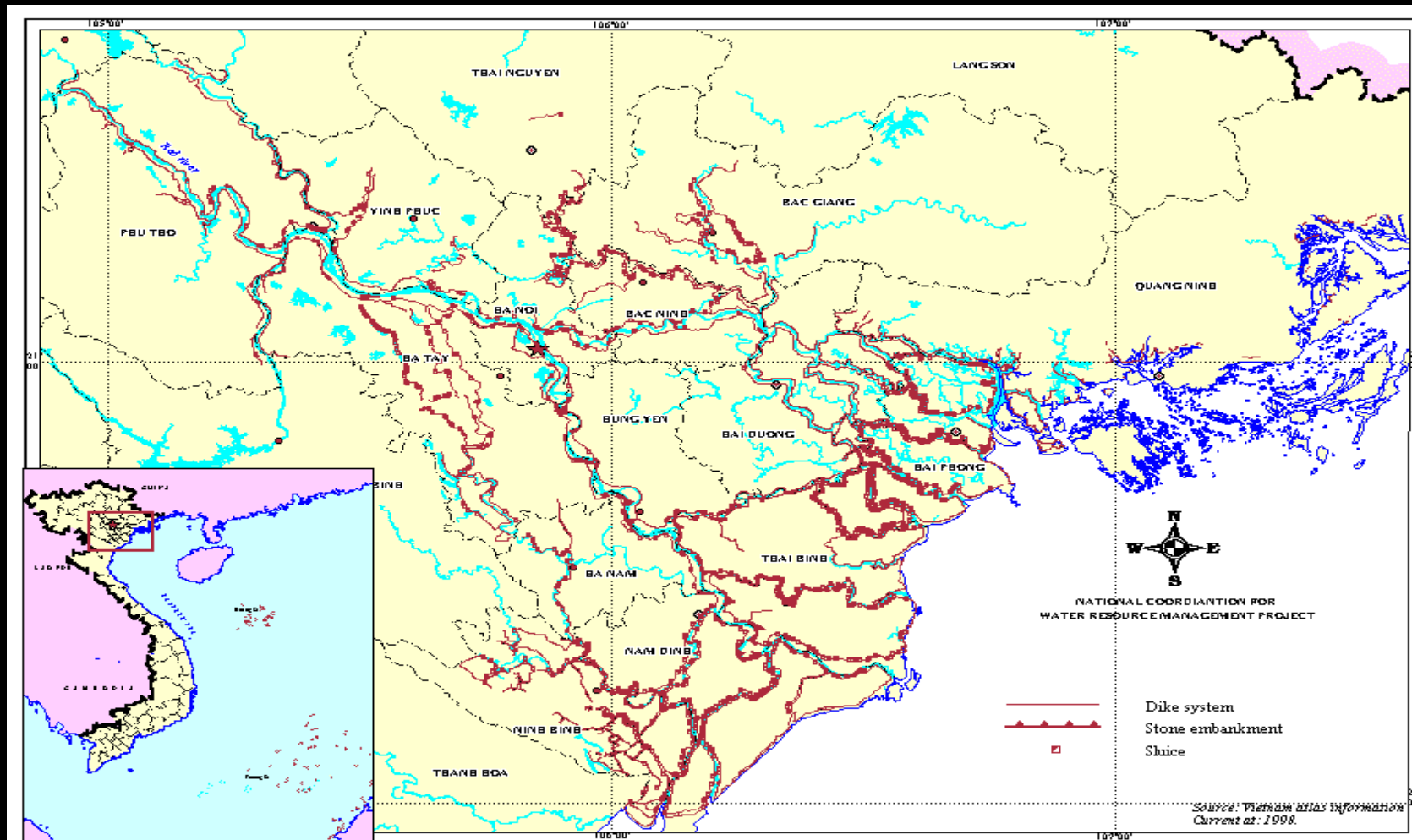


II. OVERVIEW OF SUCCESSES AND CONSTRAINTS IN DEVELOPMENT OF WATER RESOURCES

I. Successes

- a. Good implementation of socio-economic development strategy, objectives.
- b. Implementation of natural disasters protection and mitigation strategy
- c. Water resources management.
- d. Science and technology
 - Investigation and design.
 - Construction.
 - Management, exploitation and operation.
 - Flood protection and dyke management.
- e. Development of human sources.

Flood Protection Systems Red River Delta



II. OVERVIEW OF SUCCESSES AND CONSTRAINTS IN DEVELOPMENT OF WATER RESOURCES

2. Constraints

a. Constraints in *Water Resources Development*

- In recent years, studies, planning for integrated use of water resources have been carried out.
- Since 1990s, study conditions were better.
- The constraints should be solved to production patterns and market.
- Basic construction is also limited. In many new systems, only headwork and main canals have been invested.
- Design capacity is normally not ensured.

II. OVERVIEW OF SUCCESSES AND CONSTRAINTS ...

2. Constraints

b. Constraints in *Management of Water Resources and Works*

- Implementation mechanism of Law of Water Resources is not adequate and powerful.
- Further, state management capacity does not meet requirements
- Participatory in compliance with the law and the ordinance is still limited.
- Exploitation and management of hydraulic structures are not relevant to the existing infrastructure.
- Collected water fees are not enough for management, operation, and maintenance of structures.
- Participatory in development and management of water resources is very limited

II. OVERVIEW OF SUCCESSES AND CONSTRAINTS ...

2. Constraints

c. Constraints in *Technology, science activities*

- Technology, science activities are still not in time.
- Flood forecast and warning, river training should be more invested in to achieve a high accuracy and forecast .
- In the market economy, investment costs for technology and science are limited.
- Many scientific studies which have been accepted.
- Infrastructure of the scientific studies is still low, and does not meet requirements of industrialization and modernization programs to develop and manage water resources.

II. OVERVIEW OF SUCCESSES AND CONSTRAINTS ...

2. Constraints

d. Constraints in *Human sources*

- In general, activities of staff in the market mechanism is low;
- Foreign language level is limited;
- Poor in update and exploit technical information;
- Distribution of labor forces between regions is not balanced.
- Staffs in district agencies in mountainous and midland provinces, labor forces are not sufficient.
- Education and age
- In provincial departments, there are no doctors, mostly.
- Skilled scientific staff and technical workers are not sufficient.

II. OVERVIEW OF SUCCESSES AND CONSTRAINTS ...

3. Opportunities and Challenges

Opportunities

- a. The Party and the Government is more and more interested in development;
- b. Technical – economic conditions of the country are better.
- c. International cooperation in management and development of water resources
- d. Cooperation development, advanced technology science transfer

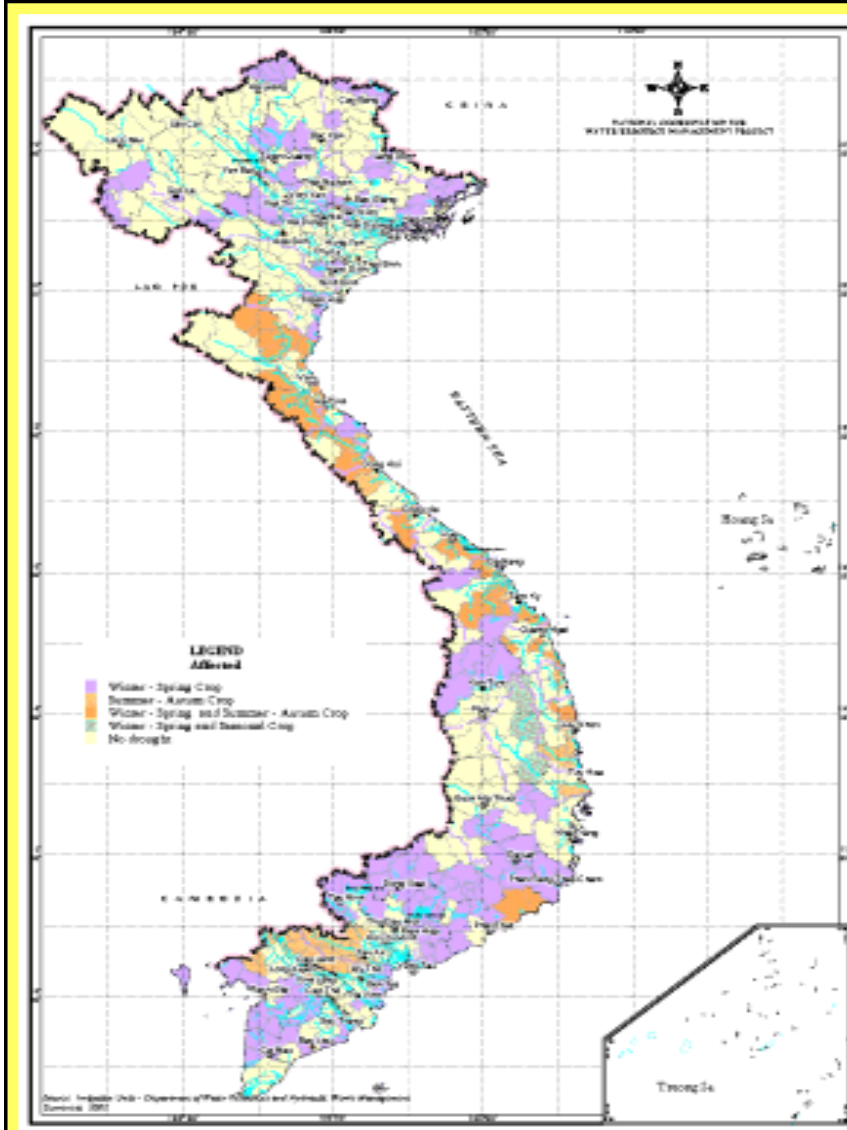
II. OVERVIEW OF SUCCESSES AND CONSTRAINTS ...

3. Opportunities and Challenges

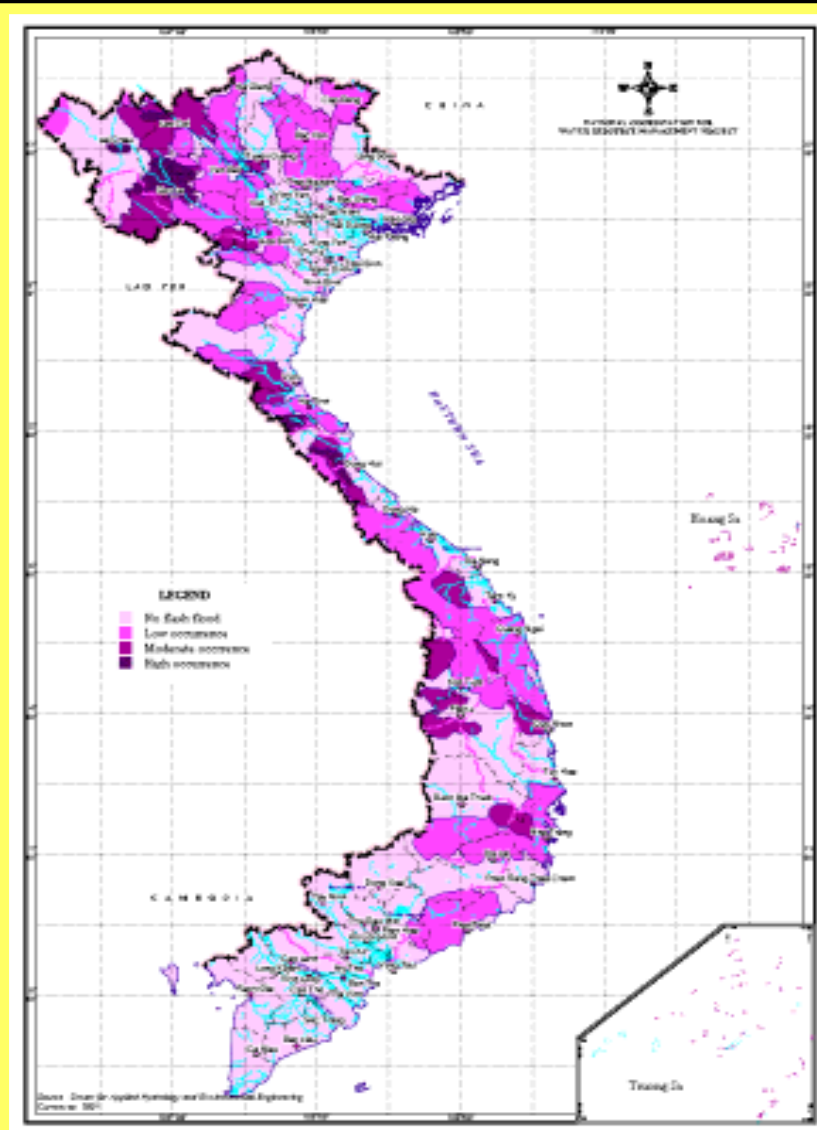
Challenges

- Water resources start degradation and are continuously affected by destroying forests, pollution and global climate variations
- Economy is increasing continually; water demand of socio-economic sectors will be increased more and more.
- Pressure of population and life quality will be increased in several future decades.
- Conflicts of water rights of countries along international rivers are increasing time by time.
- Conflicts of rights relating to water sources between local areas, especially in inter-provincial, inter-district irrigation systems arise and will increase.

Drought in 2002



Flash Flood



Because of the above-mentioned challenges, the water resources sector should have reasonable development and management solutions of water resources, reasonable exploitation of irrigation systems to ensure sustainable development, public benefits and equality between local areas and sectors.

III. ORIENTATION FOR RBO's ACTIVITIES TO SERVE FOR INTEGRATED WATER RESOURCES DEVELOPMENT IN RIVER BASIN

1. Legislative document for RBO organization arrangement.

- Ministry of Natural Resources and Environment (MoNRE) takes some functions on state management on Water Resources from MARD.
- Ministry of Agriculture and Rural Development (MARD) takes responsibility for state management on RBO in Vietnam.
- Department of Water Resources (DoWARE) – General Office for RBOs in Vietnam.
- The operation and activities of the River Basin Organization is under the responsibilities of MARD.

III. ORIENTATION FOR RBO's ACTIVITIES ...

2. Other concerned legal documents supporting RBO activities.

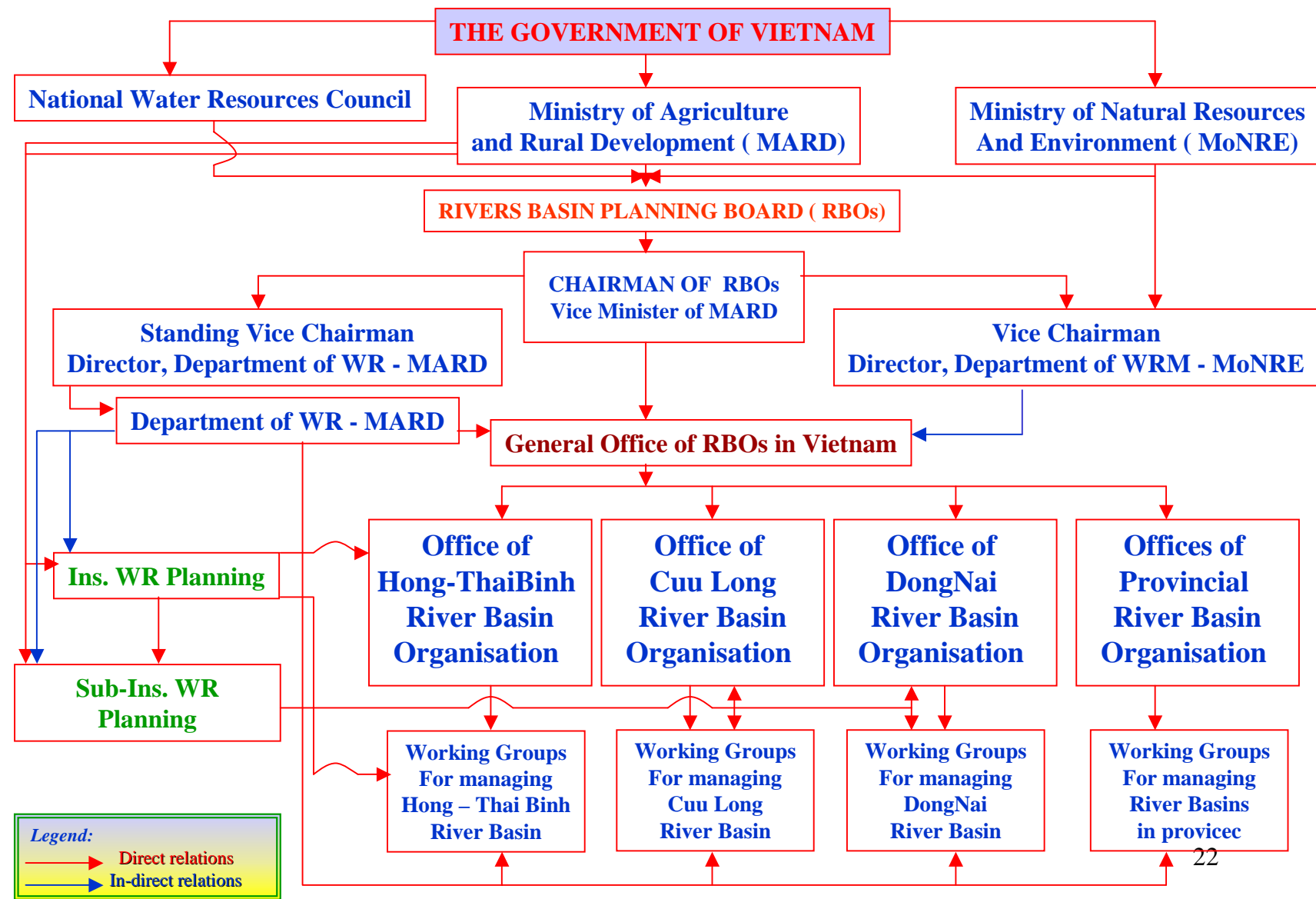
- Decree No. 179/199/ND-CP of the Government on defining the implementation of the Water Resources Law;
- Ordinance No. 32/2002/PL-UBTVQH10 on exploitation and protection of the hydraulic works .
- Ordinance No. 26/2000/PL-UBTVQH10 on Dyke Management.
- Decision No. 67/2000/QD/TTg of the Prime Minister on the establishment of the National Water Resources Council .
- Decision No. 99/2001/QD/TTg of the Prime Minister on the Regulation on organization and operation of the National Water Resources Council .

III. ORIENTATION FOR RBO's ACTIVITIES ...

2. Other concerned legal documents supporting RBO activities.

- Decision No. 37,38,39/2001/QD/BNN-TCCB by the Minister of Ministry of Agriculture & Rural Development (MARD) on establishment of Cuu Long, Hong-Thai Binh, Dong Nai River Basin Planning Management Board.
- Regulation on groundwater resources exploitation and exploration and drilling licensing.
- Decree on the guideline of implementation of the hydraulic works exploitation & protection ordinance
- **Especially, Working Regulation on organization and operation of RBO in Vietnam.**

ORGANISATION CHART OF RBO IN VIETNAM



III. ORIENTATION FOR RBO's ACTIVITIES ...

3. The proposed orientation for activities of RBOs:

3.1. *The tasks of RBO.*

- Develop river basin plans, submit for approval and monitor the implementation;
- Coordinate related agencies, Ministries, sectors and provinces in basic investigation; water resources inventory and assessment; development, submission for approval and monitoring the implementation of plans for sub-basins under its River System.
- Recommend solutions for disputes.
- Coordinate with other relevant agencies to investigate and make recommendations and international cooperation (if necessary) in management, exploitation of water resources and other relating resources its Basin.

III. ORIENTATION FOR RBO's ACTIVITIES ...

3. Orientation for Activities of RBOs:

3.2. Approval of water resource planning

- Many water resources planning projects have been carried out in given river basins in which the approaches of integrated exploitation planning and environment protection of river basins have been applied.
- The proposed hydraulic works in the project have to serve for multi-purpose and multi-sector proposals.
- Many projects on water resources planning has been completing and submitting for approval.

III. ORIENTATION FOR RBO's ACTIVITIES ...

3. Orientation for Activities of RBOs:

3.3. International Co-operation:

- Since three River Basin Organizations have been established, with the assistance of ADB, AusAid, these RBOs have been provided office and its staff, identified the priorities in each aspect, established the working group and organized workshops to raise awareness and skill in term of management for RBO office staffs.

III. ORIENTATION FOR RBO's ACTIVITIES ...

4. Obstacles.

- ✓ The operation regulation of RBO is not issued yet, but the final draft have been summited to the MARD Minister.
- ✓ The limited in the river basin management and also coordination between central and provincial level. In the future, capacity building should be required.
- ✓ Otherwise, constraint in the fund for the operation of the RBO. We hope that international will pay more attention to finance activities of RBO in Vietnam.

5. Recent activities.

- ✓ A draft regulation on organization and operation of RBO .
- ✓ Propose to increase the budget for RBO activities .
- ✓ Requesting international agencies to keep assisting the operation of RBO

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and rural development of vietnam (MARD)

1st GENERAL NARBO MEETING

**thank you
for your attention!**

see you in vietnam!

**River basin organization in vietnam
and its contribution to water resources development in the future**