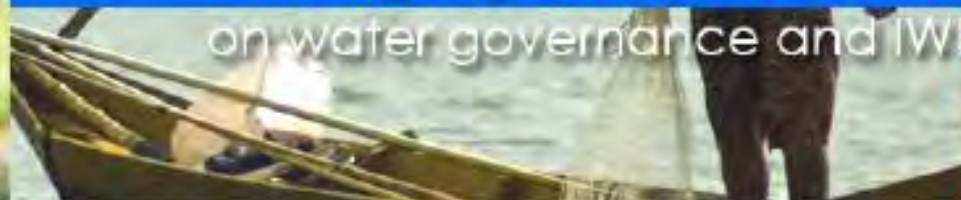




# Better Governance:

Inclusive Approach  
through good practices  
on water governance and IWRM



## *Better Governance on IWRM in Cambodia*

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*Ministry of Water Resources and Meteorology*


*On 13 December 2017*



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# 1-Overview

Abundance and shortage of water in Cambodia is the most favorable characteristic for the development of the country. However its availability depends upon the season, geography and climate which are strongly dominated by the hydrological and climatic condition of the Mekong River Basin, whose catchments cover about 86% of the country territory of Cambodia.

The Royal Government of Cambodia recognizes that its national economic development and growth is challenged increasing the complexity of managing the competing demands for water, and the Government committed to ensure that the management and development of water resources is more effective for the sake of long-term benefit and sustainability. In addition, climate change is likely to increase the frequency and intensity of floods and droughts, and the need for improved water resources management.





Comprehensive and inclusive approach in collaboration with all development and social sectors will be taken as basic strategy

Within the Rectangular Strategy Phase III for Growth, Employment, Equity and Efficiency and the National Strategic Development Plan 2014-2018 which ensures development sustainability and poverty reduction and to move Cambodia out of the Least Developed Countries and to become an Upper-Middle Income Country by 2030 , the Royal Government of Cambodia has focused on:

- i) Providing all citizens with clean and safe water
- ii) Protecting all citizens from water-related hazard;
- iii) Providing adequate water supply to ensure food security, economic activities and appropriate living standards; and
- iv) ensuring water resources and an environment free from toxic element, while enabling a supportive fisheries and ecological system.



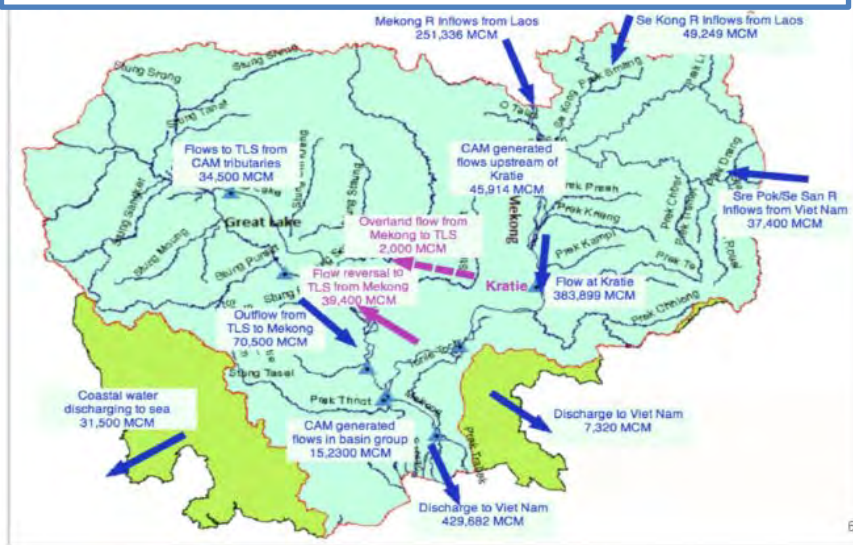
Water security for the sustainable development and management has to be brought together the social and economic benefits with the environmentally sound consideration and Cambodia commits to working to ensure this ultimate goal from enhanced national actions and responsibility to regional and global cooperation context



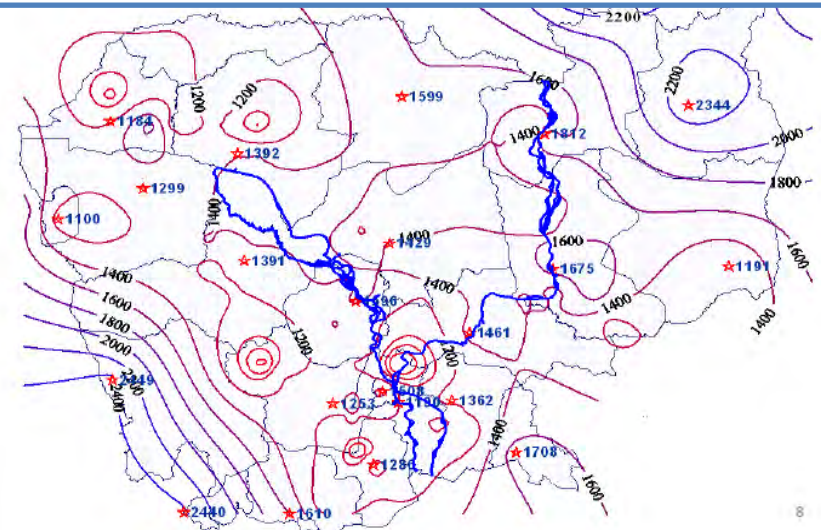
## 2- Water Resources

The “Rectangular strategy” is on-going, based on data accumulation and comprehensive analysis such as water flow, meteorology and

### *Water resources occurrence and movement across country*



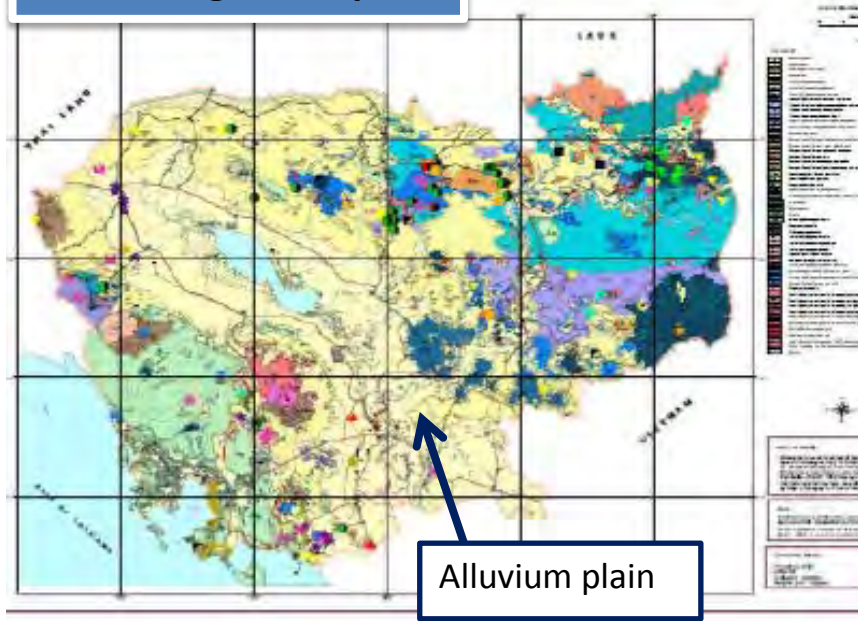
### *Annual rainfall contour Map in Cambodia (mm)*



# 2- Water Resources

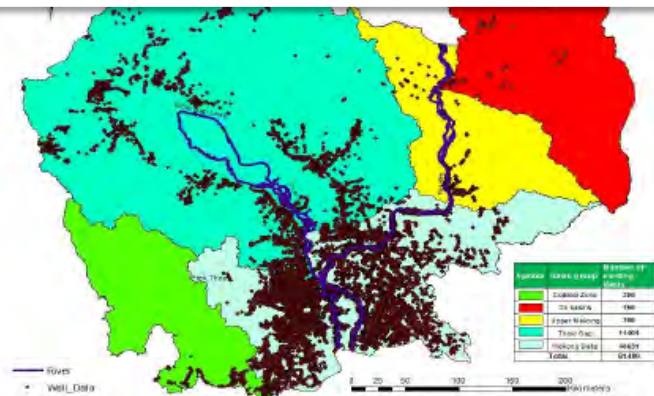
## (cont.) ground water and its utilization.

Geological map



Alluvium plain

Basins and configuration of existing wells

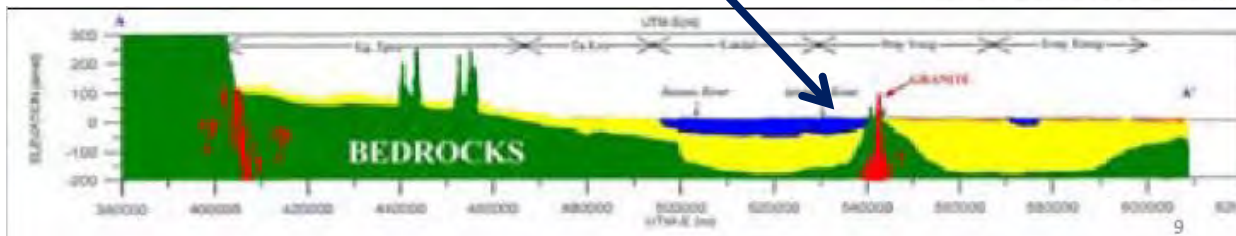


- Urban water supplies (Siem Reap, Prey Veng, Svay Rieng)
- Groundwater is widely used throughout the country, particularly in rural areas for domestic and drinking
- 53% of households depends on groundwater (270,000 wells)
- Supplement irrigation (rice farming in Prey Veng and Svay Rieng provinces)

**Principal sources of Groundwater are in the:**

(1) Young alluvium plain around the TLSGL (បឹងទន្លេសាប, Tonlé Sap) and MK (Mekong) delta, and (2) Old alluvium plain further from the lake shores

Cross section of geology and aquifer





# 3- Water resources challenges and constraint

Too much water in the wet season



Flash Flood in Rural Area



Flooded in Urban and heritage temple



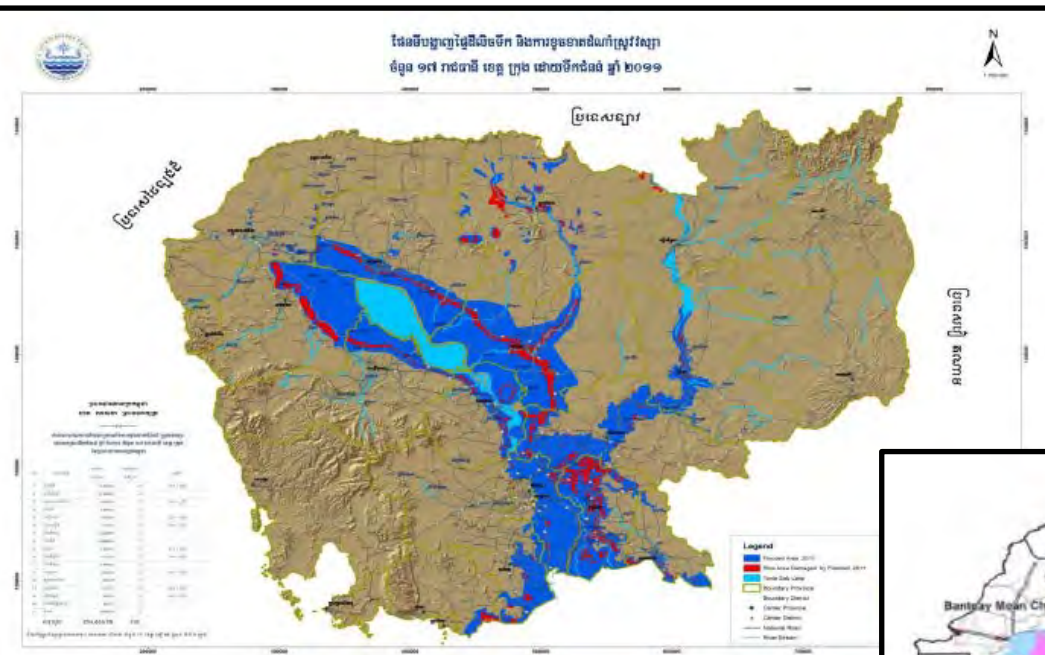
Trans-boundary issue



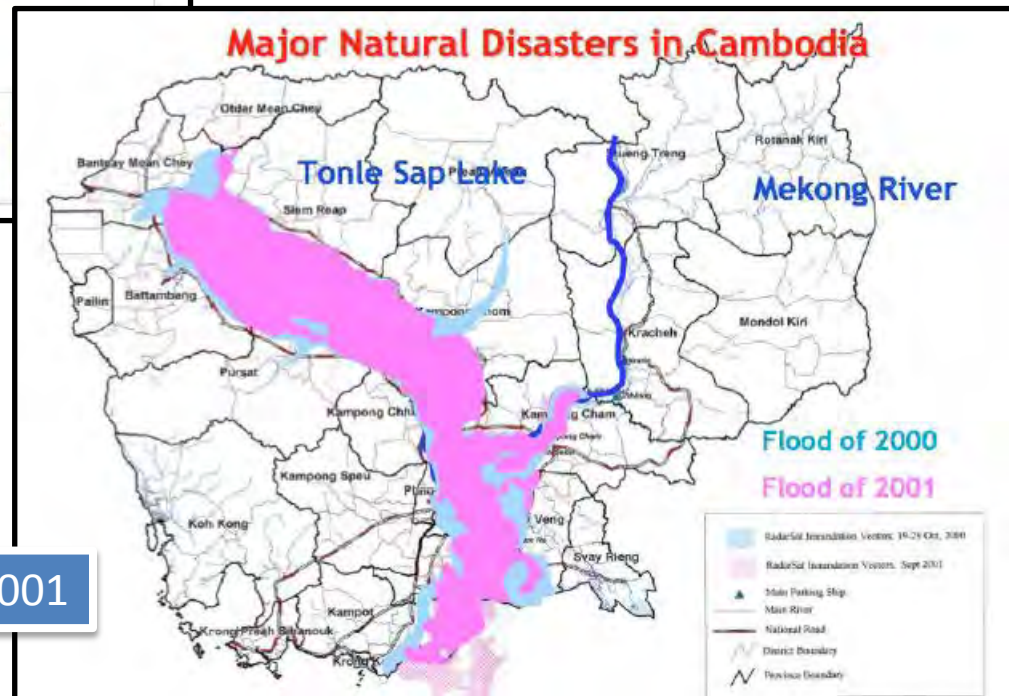


# 3- Water resources challenges and constraint

Government has made effort to enhance the capacity on “Data accumulation and comprehensive analysis on flood”



Flooding map in 2011




Flood in 2000 and 2001









## **4- Legality Framework of Water Resources Management**

### **Strengthening Implementation at Regional and National Level**

- **1995 Mekong Agreement**
- **Five MRC Procedures for Water Utilization**
- **Water Law in Cambodia**
- **Sub decree on Farmer Water Users Committee**
- **Sub decree on River Basin Management**
- **Sub decree on Water Quality**
- **Bub decree on Water Licensing**
- **Water Resources Policy**
- **Water Resources Strategic Plan**

**Government has been setting up the legal frame work step by step, but the competition among different sectors and users will increase rapidly**



## 5- Water science and needed

- Determining how much water is available
- Advising on sharing the water resource
- Advising on how to sustain the riverine environment, avoid mistakes
- Identifying risks to the water resource
- Monitoring availability and ecological impacts
- Assisting with smart, more efficient use of water
- Water policy formation and management
- Water infrastructure investment planning

**Several measures about development of infrastructure and human resources (such as JICA project) are on track !**



**Increasing competition on water allocation and degradation of water quality because of rapid change of economic and social condition**

**Cambodia is one of the major destination countries of foreign investment, and more than 40 SEZs (Special Economic Zone) are in operation and plan.**

**Phnom Penh SEZ**



**Tai Seng Bavet SEZ**



**Sihanoukville Port SEZ**



**To meet the tremendous demand on development of infrastructure for not only new industry but also rural areas in consideration of sound water cycle, it is necessary to facilitate the installation/introduction of “easy and low cost technology” and “appropriate and applicable approach” as well as to ensure the budget and/or investment.**

Thank you for your attention

