

Cambodia • Lao PDR • Thailand • Viet Nam
For sustainable development



Council Study

Development Scenarios for the Irrigation Thematic Area

6th RTWG Meeting
Phnom Penh, Cambodia
17-18 December 2015

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1. BACKGROUND

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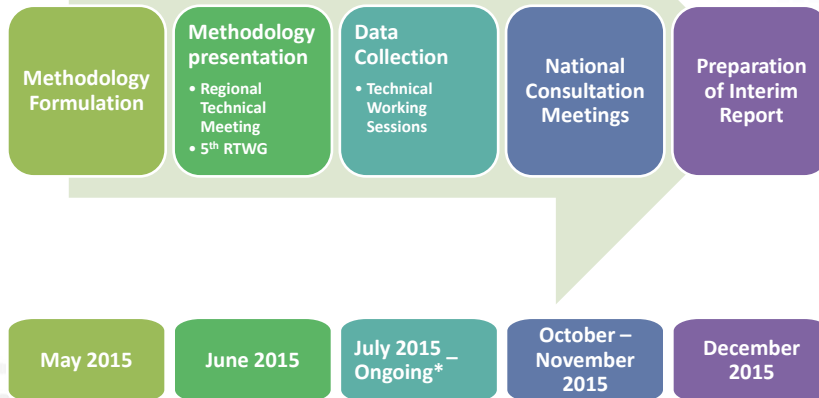
Objectives

- Develop and agree on a common methodology for the scenario development
- Collect the necessary information to document the Irrigation Thematic area development for three time horizonsb-b2007 – 2020 - 2040
- Formulate scenarios for the thematic area for evaluating their impacts on the LMB



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Activities



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Member Countries Participation in Formulation of Development Scenarios



- Progress of data collection activities highly depend on inputs from MCs
- Regional Technical Meeting
- 4 Technical Working Meetings were conducted with the National Consultants
- 4 National Consultation Meetings

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Technical Working Meetings



Discussions on:

- (1) Technical guidance for the activities of scenario development
- (2) Data requirements and handling data gaps
- (3) Quality Control of the first data collected
- (4) Role of the National Consultants for Soil Moisture and Soil Erosion, Fertilizer and Pesticide use and Impact Assessment
- (5) Preparation of the National Consultation meetings

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NATIONAL CONSULTATION MEETINGS



- **Thailand**, Bangkok on 26th of October
- **Cambodia**, Phnom Penh on 6th of November
- **Vietnam**, Ho chi Minh on 12th of November
- **Laos**, Vientiane on 26th of November

KEY RESULTS

- Approval of the Scenario formulation methodology
- Take note on the progress made so far by the project
- Take note on the activities performed and to be achieved by the national consultants

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2. SUMMARY OF DATA COLLECTED

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Data Collection Summary



Dataset	Cambodia	Lao PDR	Thailand	Viet Nam
Dataset for Scenario Formulation	No dataset provided yet	No dataset provided yet	Data compiled at a province level for the ED scenario and partially for the DFS scenario No dataset provided for the PDS scenario Data concentrated on the corridor	Dataset provided for the two areas (Delta and Central Highlands) for the three scenarios
Dataset for Selected Projects	Datasets for 3 projects compiled – To be reviewed	Datasets of 10 projects compiled	Datasets for 10 projects compiled	No dataset provided yet
Report on Scenario Formulation	Not prepared yet	One draft version of the report prepared and commented – To be reviewed	Draft prepared. To be further developed	Draft prepared and reviewed. Final version to be submitted
Report for Selected Projects	One draft report prepared for the three selected projects – To be reviewed	Not prepared yet	Draft prepared documenting clearly the 10 selected projects	Not prepared yet
Draft Update Report on Fertilizer and Pesticides	One draft report prepared	No Report but a complete dataset	Not prepared yet	Draft prepared and reviewed. No revised version yet.
Draft Update Report on Soil Moisture and Erosion	One draft report prepared	One draft report prepared	Not prepared yet	Draft prepared and reviewed. No revised version yet.

Not Provided	Incomplete	Finalized
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SUMMARY BY COUNTRY



Activity	Cambodia	Laos	Thailand	Vietnam
Development Scenarios				
Early Development Scenario	Work in progress	+	+++	+++
Definite Future Scenario	Work in progress	Work in progress	+	+++
Planned Development Scenario	Work in progress	Work in progress	Not available	++
Report on Development Scenario and National Strategy	-	++	++	++

+++	Finalized, reviewed and completed at the province level
++	To be reviewed
+	Draft document
Not available	Dataset not available for the study
Work in progress	Dataset under construction, not communicated yet

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3. DATA GAPS

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Data Gaps



- Gap Analysis
- Proposed Gap Filling Strategy
- Revised Dataset

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GAP ANALYSIS (1)



- ▶ Based on the overall progress on mid December, the data collected are not meeting the request.
- ▶ The datasets are not homogenous:
 - Spatially between countries and
 - Temporally by scenario
- ▶ The datasets are not detailed enough
- ▶ The datasets collected to date are not sufficient to **formulate the scenarios** for the Irrigation thematic area at the basin level

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GAP ANALYSIS (2)



- ▶ A Gap analysis was conducted for the development scenario datasets
- ▶ The Analysis focused only on the Irrigation areas declared
- ▶ The basis for the comparison was the BDP2 datasets
- ▶ The analysis is difficult, some data may not be defined in the same way
- ▶ The time horizon and objectives of BDP2 and CS are different

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Irrigation Area in Ha	Council Study			BDP2		
	ED - 2007	DFS - 2020	PDS - 2040	2000	2015	2030
Cambodia	no data	no data	no data	504 225	778 403	1 155 815
Laos	130 594	no data	no data	165 985	450 730	716 516
Thailand	271 938	571 993	not available	1 412 298	2 358 918	2 397 680
Vietnam	3 162 346	3 145 432	3 084 459	1 919 643	2 044 884	2 062 830

- ⇒ No data communicated from Cambodia
- ⇒ No dataset communicated from Laos at the province level for the DFS and PDS
- ⇒ Large differences in Thailand data: Only data on the riverine provinces communicated
- ⇒ Differences in Vietnam data

In the charts proposed in the next slides, the comparison is done for:

- 2000 – BDP2 vs ED 2007
- 2015 – BDP2 vs DFS
- 2030 – BDP2 with PDS

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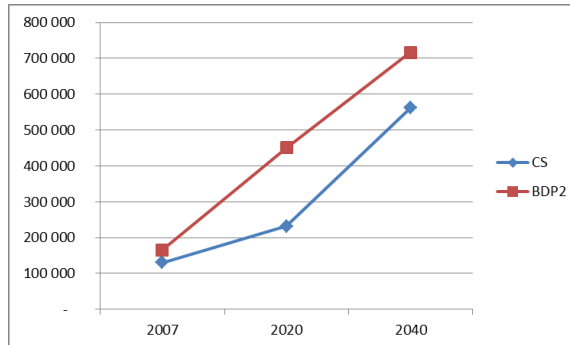
LAOS DATA GAP ANALYSIS



LAOS	2007	2020	2040
CS	130 594	232 294	561 719
BDP2	165 985	450 730	716 516

Data of the Large Projects only

The data for the Council study made available concentrate only on the Large projects for the DFS and PDS



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THAILAND DATA GAP ANALYSIS



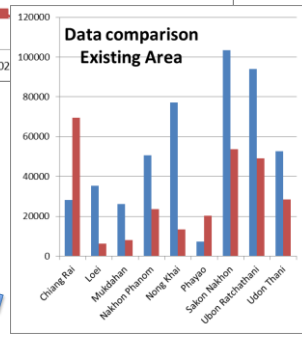
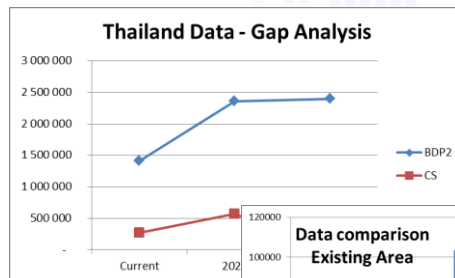
Different Data

Different Coverage

Province	Council Study	BDP2
Amnat Charoen		x
Borikhamxay		x
Buriram		x
Chaiyaphum		x
Chiang Mai		x
Chiang Rai	x	x
Kalasin		x
Khon Kaen		x
Loei	x	x
Maha Sarakham		x
Mukdahan	x	x
Nakhon Phanom	x	x
Nakhon Ratchasima		x
Nong Bua Lamphu		x
Nong Khai	x	x
Phayao	x	x
Roi Et		x
Sakon Nakhon	x	x
Si Saket		x
Surin		x
Ubon Ratchathani	x	x
Udon Thani	x	x
Yasothon		x

Only 9 provinces out of 23 are covered

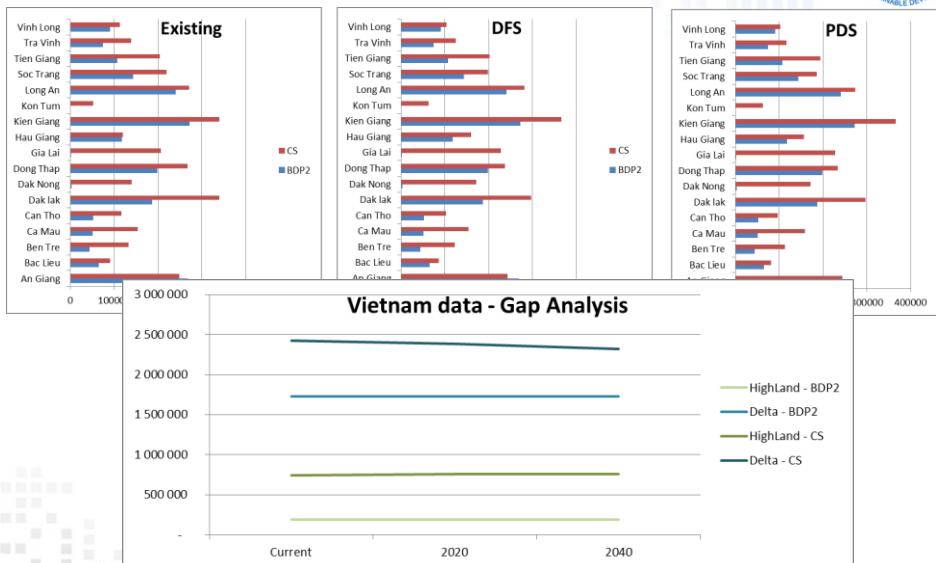
Differences in the areas declared for these 9 provinces



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VIETNAM DATA GAP ANALYSIS

Differences by province



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Towards a Gap Filling Strategy



- ▶ The CS needs to have an homogenous dataset between countries covering the whole Lower Mekong Basin
- ▶ The CS needs a dataset for three scenarios: 2007 – 2020 and 2040 at a detailed level
- ▶ A strategy should be proposed to allow the CS to progress. This strategy will have to work with:
 - *The values presented so far in the NC reports and datasets with quality control*
 - *The values of the BDP2 taking care of the differences of approach and timelines*
 - *Some scientific assumptions based on best professional judgement*
 - *The guidance of the national consultants*

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Example of Gap Filling for the Interim



- ▶ In order to have global national figures for the interim report, the gap filling strategy was implemented
- ▶ A revised dataset has been prepared with the help of:
 - The values of the BDP2
 - The values mentioned in the reports instead of the datasets
 - Assumptions based on best professional judgement

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Example of Gap Filling for the Interim



	Cambodia	Laos	Thailand	Vietnam
2007 - ED	Value extracted from BDP2	<i>As per the dataset communicated</i>	The value of the report covering the basin is used instead of the dataset	<i>As per the dataset communicated</i>
2020 - DFS	Value extracted from BDP2	Value of the dataset communicated + Assumption for the medium and large scale irrigation	The proposed development rate of the dataset is applied to the ED values	<i>As per the dataset communicated</i>
2040 - PDS	Value extracted from BDP2	Value of the dataset communicated + Assumption for the medium and large scale irrigation	Value extracted from BDP2	<i>As per the dataset communicated</i>

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Proposed Revised Dataset



<i>Irrigation Area in Ha</i>	Proposed Data		
Country	<i>ED - 2007</i>	<i>DFS - 2020</i>	<i>PDS - 2040</i>
Cambodia	<i>500 985</i>	<i>778 403</i>	<i>1 155 815</i>
Laos	130 594	<i>350 000</i>	<i>652 215</i>
Thailand	<i>1 118 445</i>	<i>2 352 531</i>	<i>2 397 680</i>
Vietnam	3 162 346	3 145 432	3 084 459
Total	4 912 370	6 626 366	7 290 169

Data issued from a gap filling strategy

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4. SUMMARY

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In Summary



- **Data collected:** not homogenous and not sufficient. Additional data collection is uncertain to improve significantly data set
- **Data analysis:** Gap filling strategy is recommended
- The methodology of the gap filling strategy should be **proposed and validated**
- Revised Data Set (with Gaps Filled): Proposed for Consideration

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The RTWG is requested to:



- Take note on the progress made
- Agree on the data filling strategy and on the resulting revised data set
- Provide further guidance and feed back



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Thank You



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