

Enhancing opportunities with the nexus of energy, food and water security for more sustainable Greater Mekong Subregion (EFWS2)

Organisers: SEI-IWMI-SUMERNET

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Final key messages (about 500 words)

1. **Rapid population and economic growth results in increasing food and energy demand** in the Mekong region, which is highly connected through transboundary migration, investment and how natural resources are sourced and processed.
2. **Key development issues resulting from securing the food and energy demands can bring both positive and negative impacts.** When appropriate, these should be analyzed in terms of cost and benefit. When costs and benefits cannot be put in quantitative terms, stakeholders should be consulted.
3. **Hydropower development** can contribute to energy for development and opportunity for irrigation expansion. But this may negatively affect fisheries, sediments, communities and biodiversity. Similarly, **bio-energy crops and cash crops** offer livelihood opportunities, but in some areas they are quickly overtaking arable land, competing with food crops.
4. Hydropower and cash crops can increase income on the average. However, for poverty reduction and improved well-being while maintaining the environment integrity, **a distribution of impact in term of concerned policies** (e.g. land ownership), governance (e.g. river basin management) and practice (e.g. contract farming) **to different groups must be considered.**
5. **Capacity building and raising awareness** is needed on **understanding trade-offs** from the development across sectors and **building a dialogue** among water, energy, and agriculture practitioners as well as users who have different interests.
6. **Several decision support tools and models have been applied to assess the implication to water balance, agriculture, energy as well as livelihoods in the region, but most of them are applied to individual sectors.** Capacity is needed for cross-sectoral analysis, where it is needed. This can build on past and ongoing cross-sectoral studies.
7. **Tools for quantitative analysis range from simple spreadsheets to distributed models that include reservoir operations to more comprehensive systems to address the water-energy-food nexus.** This last item includes the LEAP-WEAP integrated platform. These tools and methodologies have different advantages, and different requirements for human capacity and input data, depending on the assessment problems and areas.
8. **Involving the stakeholders concerned in the assessment** through focus group discussion, household survey and scenario building exercise is a good way to incorporate local insights.

9. To enhance the opportunities with the nexus of energy, food and water security in the Mekong region, more concrete regional cooperation and actions among concerned countries should be on **STANG-P&D cooperation** (ความร่วมมือสอดคล้องและคำนึงถึงความเท่าเทียมกันทางสังคมและการพัฒนาที่ยั่งยืนที่เป็นมิตรกับสังคมและสิ่งแวดล้อม):

- **S: Sharing** of data, knowledge and expertise
- **T:** Application of **integrated water-energy participatory planning tools** for decision making (e.g. MRC IWRM, integrated LEAP-WEAP, and others)
- **A:** Regional **assessments** that consider the interaction of water, energy and food security while taking into account uncertainty of climate change,
- **N: Negotiations** and dialogue to find feasible solutions on trans-boundary issues,
- **G:** Improved **governance** at national and regional levels to enable cross sector, scale and border cooperation.
- **P&D:** Coherent and redistributive **policies** for social equity as well as socially and environmentally sound **development**.

Final key messages (about 150 words)

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