Better use of nutrition resources for sustaining aquaculture production in Central Vietnam under climate change condition (SANSIV) (38975)

The main objective of the project is to contribute to the sustainable development of coastal aquaculture in Central Vietnam under climate change condition through better use of available nutrition resources.

ARSINC (Aquaculture Research Sub-Institute for North Central (ARSINC), under Research Institute for Aquaculture) No.1 (RIA1) in Vietnam is the applicant and main responsible while DTU Aqua is the Danish partner. The immediate objectives of this project are:
- Better use of nutrition resources by developing cost-effective formulated feeds for permit (Trachinotus falcatus) and by application of non-feed based and improved integrated aquaculture models as adaptive practices in coping with the impacts of climate change in Central Vietnam.
- Propose and disseminate adapted aquaculture options to farmers, authorities and other stakeholders in response to climate change condition.

The project management and coordination have so far been in good status. Overall the project made appropriate progress toward achievement of the project's objectives. Reports on analysis of aquaculture system in Central region including Coastal farmer's livelihood and vulnerability to climate change were finalized. The reviews on known environmental effects of traditional diets for fish farming are on their final stage. Workshop on adaptive aquaculture techniques and models in response to climate change condition and proposed recommend policy was organized. These are served for proposing both adaptive aquaculture techniques/models and policies for local authorities. Through training course and study tour adaptive aquaculture techniques/models have been introduced to local farmers and extension workers.

Regarding to development of cost-effective grow-out pellet feed for the selected commercial carnivorous fish species - pompano (Trachinotus falcatus) as case study to replace trash fish in response to global limitation of fish meal and fish oil, all original planned experiments have completed. Additional experiments required for PhD student's study will be carried out and finished within 2016. Experiments/trials on farming techniques for non-feed based species (hard shell clam Meretrix lyrata, macro algae Kappaphycus alvarezii) and integrated multi-tropic (shrimp and seaweed) have completed.

There have been 5 published articles, of which one article was published in an international peer review journal as the result of joint contribution between Vietnamese and Danish scientists.

All 3 MSC students from Aquaculture Research Sub-Institute for North Central (ARSINC-responsible institute) have finished their education through participation in project experiments by the end of 2015. These MSc staff will contribute to building research capacity and sustainability for ARSINC. Addition, one MSc student from Department of Science and Technology, Nghe An province, was also educated through participation in project experiments. This project was coordinated by Aquaculture Research Sub-Institute for North Central, Research Institute for Aquaculture, Vietnam.

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National Institute of Aquatic Resources
Section for Aquaculture
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