Report of SuPa' second annual meeting of the Steering Committee.

Meeting room of CTU-CAF at Can Tho city, Vietnam, 4-12-2012

Agenda 1/ Opening by the chair en project director Prof Johan Verreth.

2/ Progress and planning of R1: Improving Pangasius Feed, Ms DT Huong, TT Hien (TLC Tu).

3/ **Progress and planning of R2**: Improving Pangasius Waste Management, Mr Nguyen Nhut. 4/ Visit of the R1 experimental area and feed mill.

5/ Plan for R3 economics: Method & budget to assess Economic Feasibility, Dr Tru.

6/ Plan for R3 environment: Method to assess impact mitigation, Ms Trang

7/ Cost account 2011-12, Dr Roel Bosma.

8/ Other matters.

9/ Closure of the 2nd annual meeting by Prof Johan Verreth

Participants

1. Ms Truong Thi Dung, Netherlands Agricultural Office, Netherlands Embassy Hanoi

2. Dr Johan Verreth, SuPa project director, Wageningen University (WU/AFI)

3, Nguyễn Thị Băng Tâm, senior officer, Directorate of Fisheries- MARD

4. Nguyễn Tử Cương, national coordinator, Fisheries Technology Services Center of Vietnam (FITES)

5. Trần Văn Vỹ, assistant national coordinator FITES.

6. Trần Thị Kim Thoa, financial administrator FITES.

7. Nguyễn Văn Hảo, senior scientist R-2, Research Institute for Aquaculture No II (RIA-2)

8. Nguyễn Nhứt, scientist R-2, RIA-2.

9. Nguyễn Thanh Phương, Can Tho University, vice-rector,

10. Dr. Trương Quốc Phú, dean CTU College Aquaculture & Fisheries (CAF).

11. Dr Tran Hai; vice-dean CTU/CAF.

12. Trần Thị Thanh Hiền, senior scientist R-1, CTU/CAF

13. Dr.Đỗ Thị Thanh Hương, Head department fish nutrition CTU/CAF

14. Nguyễn Ngô Vi Tâm, Vice-General Director, Vĩnh Hoàn Company

15. Võ Phú Đức, Feed-mill director, Vĩnh Hoàn Company

16. Đoàn Nhật Phương, Vice director of Farm Department, Vĩnh Hoàn Company

17. Đặng Thị Thương, Manager farm certification, Vĩnh Hoàn Company

18. Đào Thị Thu Hằng, Provimi-Vietnam

19. Nic Salden, De Heus Feeds

20. Percy Hien, De Heus Feeds

21. Lê Công Trứ, senior scientist R-3 Economics, Dep. Economics, Nong Lam University,

22. Như Thùy Trang, scientist R-3 Sustainability, Ghent University

23. Tran Minh Phu, scientist/translator, CTU/CAF

24. Dr Roel Bosma, WU/AFI, Netherlands

Absent (with notice): Dr Rothuis Arjo, Aquaculture office NL Ministry of Economic Affairs; Dr. Depestele Geert, Marine Harvest; Hogendoorn Harry, Queens; Trần Lê Cẩm Tú, CTU/CAF; Pham Thi Ngoc (WU-FEM/NLU); Dr. Dewulf Jo, senior scientist R-3, Sustainability, Ghent University

8h15: Welcome by Professor Verreth

8h30: Progress of R-1 presented by Dr Hien.

Phuong, Roel and Hien explain that the accumulated delay of one year is due to:

- Fish adaptation to tanks (2011);
- Functioning of the extruder to make floating feed; CTU was used to make diets for sinking pellets, thus new routines had to be developed for each new diet composition (2011-12);
- \circ Late delivery of the CrO₂ marker due to production failures (2011-2012);
- Application of another calculation method (2012).

Roel concludes that consequently on-farm testing can start in June 2013 at earliest and thus results will not be known before 2014, while the contract of Agentschap NL with the Embassy ends in December 2013 which makes budget neutral extension difficult.

- Dr Phuong and his colleagues of CTU/CAF strongly suggest that WU/AFI daily supervisor, or if he is indisposed his assistant, comes to CTU, to see and discuss directly with the local supervisors and the student. The on-line discussions and discussions with the student as intermediate also created misunderstandings and delays.
- 9h15: Progress of R-2 presented by Nhut:

Verreth:

- o advises Nhut to calculate protein balance of the four monitored ponds;
- reminds the indicators: 75% sludge revision and higher water DO. Does Nhut think he can reach these standards?
- observes that the low total carbon retention in the monitored ponds confirms that the CH4 yield from sludge will be limited, and that fermentation in the ponds are continuous;
- Nhut says that also the sediment from the RAS had an odour;
- Cuong reminds that technical results of Nhut came late, so he needs more time before commenting.
- Planning: the results of fish performance and behaviour in the tanks did raise some questions for which complementary experiments were needed, and thus the start of the pilot phase is delayed due to the calculations needed to design the pilot model;
 - Roel states that the test phase for the pilot model at RIA-2 can be shortened if larger fish are used from the start, and then R-2 aligns again with R-1;
 - \circ according to Hao such fish is available.
- Hao insists that the MARD funding also ends in 2013 and results need to be available and investments can't be postponed.
- Cuong agrees that scientist take time to calculate, but we need to consider that administrative procedures don't allow budget neutral extension into 2014, while planning extends into 2014.
 - Question is how we can assure funding the R-1 and R-2 activities in 2014; three issues need to be settled: 1/ companies should agree; 2/ the program should deliver; 3/ upon request MARD may extend 6 month.
 - And what about R-3, R-4 and R-5?
- Roel proposes to discuss these issues in the afternoon after the cost account.
- 11hr30 Lunch and visit of the experimental facilities of CTU-CAF.
- 14h00 Dr Tru present the plans to assess the economic feasibility of the new technologies to be carried out by PhD Pham Thi Ngoc.

Cuong observes that only the first topic is of direct interest for the goals of SuPa:

- o Roel answers that the other issues will interest the companies that pay the bill, and that
- The PhD and her supervisors are also looking for complementary funding after 2013.
- 14h30 Ms Trang present her plan to assess the sustainability of the new technologies using the exergetic LCA methodology.
 - Roel observes that this study was added in the interest of the contributing companies and should replace input from IMARES;
 - The collaboration of the two should reduce the demand by the various students on the companies to provide data; they need to collaborate to compose a collective data base and thus reduce the workload for the companies that provide the data!

15h30 Roel presents the activities and the cost account:

As for the funding of the delayed activities:

- Provimi agreed preliminary to fund the CTU/CAF PhD, also in 2014.
- Queens already agreed to delay (part of the) contribution until 2014.

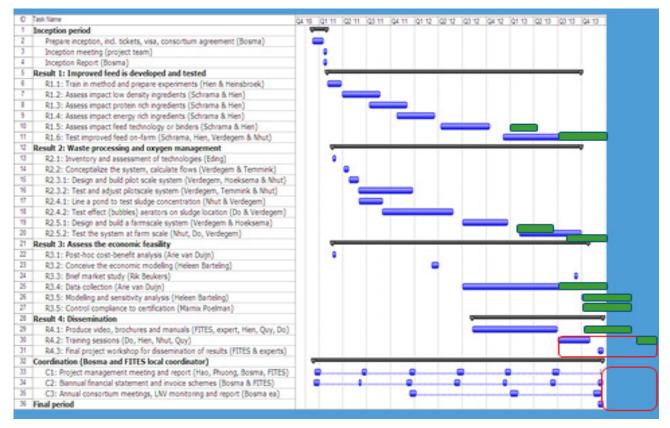
o Marine Harvest suggests that Verreth explains the situation to the directors;

Nic Salden, representative of DeHeus confirms agreement on using their contribution in 2014. Vinh Hoan will consider the delayed implementation; Duc comments that there's no need to

quantify the in-kind contribution through feed for R-2 until present.

Verreth requests Roel to :

- \circ correct the errors in the figures before publishing the presentation;
- \circ make a financial planning for 2013 and 2014 considering delays and the funding sources.



Roel plans to make a second Newsletter on the progress of the project. Cuong wonders if the results are publishable. Roel comments that a newsletter is important for the contributing companies, even if no results are published; just some comments on progress and meetings with nice pictures can make a nice Newsletter. Cuong and Roel agree in making the next Newsletter together.

16h00 Other matters

Verreth proposes that the next meeting should be scheduled just before or after the -Asia-Pacific Aquaculture conference in Ho Chi Minh city (10-13 Dec 2013).
The data collection for R-3 within the companies needs to be well coordinated and perhaps written engagements of confidentiality need to be made by the students.

16h30

Verreth closes the meeting and invites all to join the dinner at 19h00.

Report by Roel H. Bosma