CLOSING CEREMONY

CLOSING REMARKS BY

Mr. Shiro Nabeya,

The Resident Representative Of JICA In Ghana

Mr, Chairman, Distinguished Scientists, Ladies and Gentlemen.

For the past three days I have keenly listened with interest to statements by politicians and presentations by you scientist on this workshop. The objective of the workshop for the past three days has been for scientist, farmers and other stakeholders to examine the outcome of our joint research on Integrated Watershed Management in Inland Valleys in relation to improved rice development.

Mr. Chairman, according to the Director-General of the CSIR, Prof. W. S. Alhassan, the potentials of inland valleys for rice production has long been recognized and a series of research work have already been carried. He cited some of the constraints in the inland valleys development as *lack of appropriate water management, water-borne human diseases etc.*

The West Africa international institutions – WARDA, IITA have carried out similar research in inland valley bottoms for efficient agricultural production. There is already an inland valley research consortium (IVC) within WARDA. This emphasizes the great potential and importance of inland valley bottoms development for efficient and increased rice production.

The main goal of the sawah technology is to promote sustainable production systems at watershed level ecologically, socially and economically. The uniqueness of the sawah project is its integration especially with recognition of beneficiary participatory approach. The farmer involvement approach in the sawah technology development gives on-the-job training to the farmer. This makes the technology practical and adaptable by farmers.

This joint research on sawah is not an academic research exercise, but a practical demonstration on improving the lives of poor rural farmers. The improved incomes farmers derive from the sawah application have dawned on farmers to intensify the use of inland valleys especially in the piloted project areas.

According to the CRI survey, there is an upsurge in the use of inland valleys for rice production especially in Ashanti Region. Sawah has the potential not only in Ghana but also in the West African sub-region, for self-sufficiency in rice production and food security.

Mr. Chairman, this forum has not only examined the sawah as an ecotechnology but has also shared comparative ideas among stakeholders from WARDA, IITA and Ghana's CSIR. These ideas may be useful to the Ghanaian research institutions such as CRI, WRI, FORIG, MOFA, NGOs, farmers that etc who have participated in this workshop, for further improvement of the sawah technology, and vice versa.

Fortunately, the sawah project team will make guidelines for dissemination and application of the idea. These guidelines could be distributed to the stakeholders interested in the sawah technology.

It is my hope that the comments made by other scientists during the examination of the sawah technology, will be accepted in good faith by the sawah project team to enable them further improve upon this very important technology.

Ladies and gentlemen, it will take political will of the government of the Republic of Ghana and influence of research scientists to adapt and sustain the sawah technology. It is hoped that political statements in the opening ceremony will be realized.

I take this opportunity to thank the Ghanaian and Japanese scientists and all others who have participated in the sawah project. I also thank you all participants from WARDA, IITA and those from other African countries who have participated in the workshop and also for your valuable contributions. May you have a safe return home. Before closing, please clap your hands to all presenters and the workshop organizers.

Thank you very much. Medase.

CLOSING REMARKS BY

Prof. E. Owusu-Bennoah,

Deputy Director-General, CSIR (Agriculture, Forestry and Fisheries Sector)

Distinguished Ladies and Gentlemen,

It is a great honour to be asked to close this 3-day all important International Workshop on Integrated Watershed Management of Inland Valleys in Ghana – The Ecotechnology Approach.

The main goal of the project we were told was the development of sustainable production systems at watershed level, which allows intensification and diversification of the lowland production system and stabilising improved production system on the upland.

The results which have been produced under the project have been well presented and exhaustively discussed at this workshop.

I am particularly happy to see that scientists from different disciplines and Institutes have come together to work harmoniously on this project. I hope that this multidisciplinary and multi-institutional approach to doing research in this country would be sustained.

Ladies and Gentlemen, I am convinced that a lot has been learnt at the demonstration sites which should encourage us to move from the demonstration site to the on-farm. Unless this is done very quickly scientists will as usual be accused of shelving their scientific results in their laboratories to gather dust. A lot of resources have gone into this project and the Sawah technology should be transferred to farmers in the forest zone as early as possible. I wish to assure our scientists that the research component of Ghana Agricultural Sub-sector Services Investment Programme (AgSSIP) would support such useful technology transfer. You will recall the statement made by the Chief Director of MOFA that the present Government intends to reduce rice import by 50% by the end of the year. I believe that this is possible through science and technology. The Sawah technology can play a significant role to help the government achieve her noble target.

While recommending the Sawah technology, there are some gray areas which I suggest should engage the attention of scientists.

Firstly, the issue of the environment and biodiversity have not been properly addressed in the project. It is known that the Inland Valleys are the home to some important flora and fauna such as crabs, snakes, canes, raphia etc. These flora and fauna should be preserved for the present and the future generation. Should we destroy the rare flora and fauna in the inland valleys for the sake of rice production? What would be the long term effect of continuous application of agricultural inputs such as fertilisers and insecticides on the health of the Sawah practitioners?

Secondly, the problem of processing and marketing have not been actively taken into consideration, with the adoption of the Sawah technology, production of rice is expected to increase more than 50 folds. If this target is achieved then what happens to post-harvest problems of storage, milling and marketing of the produce? We are all very much aware of the frustrations rice farmers go through with the marketing of their produce. This should not happen to our Sawah practitioners. I wish to encourage this project not only to concentrate on the technology of producing rice in the inland valleys but that it should take on board other Institutes that are involved in processing and marketing of rice as well. It is high time that we adopt a holistic approach to solving problems associated with rice in this country.

Finally, ladies and gentlemen, let me appeal to the organisers of this workshop to consider publishing proceedings of this workshop for the benefit of those who were unfortunate to be here with us.

This workshop has been well organized and the contributions to the discussions of the various papers by participants had been excellent. Our foreign participants also made the workshop rich by sharing their experiences with us.

As we depart to our various countries and destinations, I hope we will carry with us the memory of good friendship that we have been able to establish among ourselves during the last three days.

Let me on behalf of the Director-General of CSIR thank the Japanese Government for the assistance that they have provided in the execution of this project. It is my sincere hope that this project will not be stopped by JICA but that it will be continued in the near future.

And on this note, ladies and gentlemen, I wish to declare this 3-day International Workshop on the Integrated Watershed Management on Inland Valleys – Ecotechnology Approach officially closed.

I thank you and may the Good Lord bless you all.

INTERNATIONAL WORKSHOP ON INTERGRATED WATERSHED MANAGEMENT OF INLAND VALLEYS - ECOTECHNOLOGY APPROACH

(6TH -8TH FEBRUARY 2001, NOVOTEL, ACCRA-GHANA)

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35.	F. OFORI (DR) CSD/MOFA ACCRA, GHANA	49.	S. BANGOURA F.A.O., ACCRA, GHANA
36.	E. SONNE CSD/MOFA ACCRA, GHANA	50.	G. KWADZO TECHNOSERVE KUMASI, GHANA

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52.	A. SANJO JICA, ACCRA, GHANA	61.	V. OREKAN NCV COTONOU, BENIN
53.	YAW TAWIAH FARMER ADUGYAMA, ASHANTI REG. GHANA	62	V.J. MAMA (DR) CENATEL COTONOU, BENIN
54.	NANA OWUSU FARMER ADUGYAMA, ASHANTI REG GHANA	63.	G.TIAN (DR) IITA NIGERIA
55.	A. OSEI-MENSAH FARMER BIEMSO NO.1, ASHANTI REG GHANA	64.	G. O. OLANIYAN (DR) IITA NIGERIA
56.	CHARLES ADUSEI FARMER BIEMSO NO. 2, ASHANTI REG. GHANA	65.	S. WOROU (DR) TTRA LOME, TOGO
57.	D. ATTAH-POKU FARMER BIEMSO NO. 1, ASHANTI REG GHANA	66.	M. WOPEREIS (DR) WARDA BUAKE, COTE D 'IVOIRE
58.	S.K. DAPAAH FARMER BIEMSO NO. 2, ASHANTI REG KUMASI	67.	M.J.DUGUE (DR) WARDA BUAKE, COTE D 'IVOIRE
59.	HAROUNA DOSSO AFRICAN DEVELOOPMENT BANK ABIDJAN, COTE D'IVOIRE		

INTERNATIONAL WORKSHOP ON INTEGRATED WATERSHED MANAGEMENT OF INLAND VALLEY – ECOTECHNOLOGY APPROACH. 6th.-8th. February 2001 Novotel, Accra

PROGRAMME

1st DAY (6th. February 2001)

OPENING CEREMONY

09:00	Registration
09:30	Introduction of Chairman
09:35	Chairman's Remarks- Prof. E. Owusu-Bennoah
09:40	Welcome Address- Director-General, CSIR- Prof. W. S. Alhassan
09:50	Statement by Japanese Ambassador in Ghana-
10:00	Statement by WARDA IVC Coordinator- Dr. M. Wopereis
10:05	Short Address by the Minister, MEST
10:10	Keynote Address by the Minister, MOFA
10:30	Chairman's Closing Remarks
10:35	Coffee Break
	TECHNICAL SESSION
	CHAIRMAN: Director, Crops Research Institute (Dr. J. A. Otoo)
11:00	The Concept of Integrated Watershed Management- Prof. T.
	Wakatsuki, Co-Project Coordinator
11:40	Overview of the project- Dr. E. Otoo, Project Coordinator

Afternoon Session:

Discussion

Lunch

12:20

12:50

CHAIRMAN: Director, Water Research Institute (Dr. C. A. Biney)

14:00 14:40	Ecological Factors Affecting Rice Cultivation in the Inland Valleys of Africa. – Dr. M. Wopereis WARDA IVC Coordinator Sustainable Agricultural Resources Management and Promotion of Inland Valley Cropping in West Africa (Dr. G.Tian (IITA)
15:20	Discussions
16:00	Close
19.00	Cocktail Party

2nd DAY (7th February 2001)

Morning Session:

- CHAIRMAN: Director. Soil Research Institute (Mr. R. D. Asiamah)
 09:30 Development of the Sawah System in some Inland Valleys of Subhumid Tropics of Ghana (Ashanti Region) Dr. W. E. I. Andah
 - The Participatory Approach for Dyke and Canal Construction at Biemso No. 1 in the Ahafo Ano District of Ashanti Region -Dr. J. T. Adomako
 - Evaluation of Four Rice Environments for Sustainable Rice Production-Dr. R. N. Issaka,
 - The Effect of Organic and Inorganic Fertilizers on Rice Growth and Yield within the Forest Agro-Ecology of Ghana Dr. M. Buri
 - Charaterisation and Evaluation of Inland Valleys of the Sub-humid Tropics for Sustainable Agricultural Production: Case Study of Ghana –
 Dr. D. Kubota
- 11:30 Discussions
- 12:00 Lunch

Afternoon Session:

CHAIRMAN: Director. Savannah Agric. Research Institute (Dr. A. B. Salifu)

- 13.00 Agronomic practices in Sawah development Dr. E. Otoo
 - Comparative Advantage of Method of Crop Establishment Under Sawah
 Dr. E Otoo
 - Across-location Screening and Selection of Rice Varieties Dr. K.Dartey
 - Comparative Studies of Rice-fish Culture and Rice Monoculture Mr.J.
 Ofori
 - Screening of Improved Cowpea Lines in Inland Valleys in Ghana Dr.
 H. Adu-Dapaah
- 15.00 Discussions
- 15:30 Effective land tenure arrangement and other socio-economic aspects in Sawah development. Sawah Technology: A Participatory Approach in the Traditional Farming Systems of Inland Forest Ecology Mrs. J. Haleegoah
 - Sawah Development Impact on the Structure of the Landscape of Biemso No. 1 Ms. M. Nawano
 - Adoption Studies of Improve Technology Dr. A.A. Dankyi
- 16.30 Discussions
- 17:00 Close

3rd DAY (8th. February 2001)

Morning Session:

CHAIRMAN: Director, Forestry Research Institute of Ghana. (Dr. J.R.

Cobbinah)

09:30 Integrated Agroforestry in Sawah Development - Dr J. Cobbinah

10.0 (Dr J. Cobbinah, Dr. D. Kubota and Mr. Owusu-Sekyere)

11.30 Discussion

12.00 Lunch

Afternoon Session:

CHAIRMAN: IVC Coordinator (Dr. M. Wopereis, WARDA/ Dr. D. Keating,

IITA)

13:00 The Way Forward.

General Discussions

14.00 Coffee Break

CLOSING CEREMONY

CHAIRMEN Deputy Director General, Agriculture, Forestry and Fisheries

Prof. E. Owusu-Bennoah (CSIR)

Resident Representative, JICA.

14: 30 Chairmen Closing Remarks

15:00 Close