## Sustainable Management of the Rupununi Wetlands: Linking Biodiversity, Environment and People

## Phase Two Training Collaborative Resource Management



**Complied by: Monitoring and Research Unit** 

**Iwokrama International Centre** 

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The second phase training of the Darwin Initiative funded project – Sustainable Management of the Rupununi Wetlands: Linking Biodiversity, Environment, and People was held from the 10<sup>th</sup> to 26<sup>th</sup> January, 2005 at Iwokrama's Georgetown Office and Field Station and in three communities (Surama, Annai, and Toka) of the North Rupununi. The training was facilitated by Dr. Andrea Berardi (Open University), Dr. Jayalaxshmi Mistry (Royal Holloway University) and Dr. Matthew Simpson (Wildfowl and Wetlands Trust) and focused on techniques for Collaborative Resource Management. This is a follow up from the first phase which was conducted in January 2004 and which focused on monitoring techniques and how to conduct monitoring programs. That training course set out the monitoring protocol for conducting biophysical monitoring of the North Rupununi wetlands. These training were done in a 'building block' fashion which is intended to equip the monitoring team with the knowledge of monitoring techniques to capture the biophysical and social aspects of the environment.

The 2005 training session was aimed at introducing techniques that will allow the monitoring team to obtain integral information on how communities used, are using and plan to use the wetland system. This will feed into the future development of an adaptive management plan for the area that captures the needs of the people and of the physical environment. This method is also geared towards getting communities to start thinking of how the monitoring programme can be integrated into community activities that will allow them to effectively manage these activities as well as feed into the overall decision making process in the communities. The main components of the training course were:

- Project evaluation The training began with an evaluation of the project as a whole
  using a series of questions aimed at understanding the perceptions and values of the
  participants towards the project. This was an important starting point for participants to
  think about whom the stakeholders of the project are and whose needs and wants were
  being addressed by the project.
- 2. Stakeholder Analysis and Social Monitoring To better understand how communities use and influence the change in the North Rupununi Wetlands it is necessary to monitor the community use of the areas. The data collected from communities on use of the resources coupled with the biophysical monitoring data will create a better picture of the

system and how best to manage it. Social Monitoring uses a number of techniques in order to obtain the data needed to better understand how different groups in the community use the wetland system. Some of the more effective techniques include:

- Semi-structured interviews: use of guiding questions to carry on a discussion
- *Transect walks*: ground truthing information provided, also helps stimulate the resource person who may provide information not mentioned before.
- **Seasonal calendars**: numerical or diagrammatic representation of resource use over a calendar year.

During the stakeholder analysis groups, institutions and individuals are identified that have an interest in, control over, derive benefits from or may be affected by the use of the wetlands. The analysis allows for an understanding of who the stakeholders are, what are the levels of their powers and what their relationships are to one another. The analysis also helps identify decision making structure, the process of decision making and where key resource personnel are.

- 3. Monitoring and Evaluation This section of the training dealt with assessing the needs and importance of monitoring the North Rupununi wetlands. There was a revaluation of the parameters which are to be monitored, and the techniques which are used to collect data. There were also sessions that focused on the importance and roles of indicators in monitoring to be used in decision making.
- **4. Data Management and Analysis** Over the past eleven months a large amount of data were collected, but data management as relates to expected data analysis had been not fully defined. The training sessions highlighted the need for good data management and how databases were built to fit the intended for of analysis. It also introduced some of the methods that could be used for the analysis of the data collected to inform decision making. There were discussions and practical sessions using the various statistical tools.
- **5. GIS and Participatory 3D Modeling** The importance of integrating GIS in a simplified form for communities is essential in facilitating participatory approaches in managing the Rupununi wetlands The purposes of GIS and participatory 3D modeling in the wetland projects include:-

- 1. Maps of various habitats
- show their distribution
- understand the systems
- map of species presence
- map of resource use
- 2. Show natural relationships
- river water levels and flow
- land and forest/savanna
- rainfall distribution
- soils
- species distribution
- 3. Influence decision making with maps
- 4. Identifying boundaries of natural systems and political system e.g. water catchments
- **6. Community visits** The training, which was conducted in a very interactive classroom session, included visits to three communities - Surama, Annai and Toka. These three communities were selected due to their relative ease of logistically visiting them during the training session. These villages were also testing grounds for the monitoring team to use their newly acquired skills of conducting social surveys. During the community visits, the monitoring team conducted focus group surveys with key stake holder factions of each community. These groups included: children and young adults, adult males, adult female and village elders. This session was done to increase the knowledge base/awareness of the project personnel and communities. Verification was done by conducting semi-structured interviews, during which information on what resources are used and the extent of usage was discussed. An indication of use intensity was demonstrated via a seasonal calendar and resource source areas where identified through sketch map drawing and the use of a 3D model. In Surama a 3 dimensional model of the village was used to identify resource use locations and also to test the participatory level of the P3DM system. While in Annai, two radio telecast were conducted on separate occasion by members of the monitoring team. This was done to enlighten the communities of the North Rupununi of the present stage of the wetlands program. In Toka, after the group's sessions, there was a friendly game of cricket between

the residents of Toka and the wetlands team members. These "tools" – 3D model, radio telecast and cricket, were all used to strengthen the information sharing and camaraderie between the project and the communities, an essential component in developing a working system of resource management. The communities will be visited in April, with the three communities already visited, being revisited.

- 7. Exploring the future of the North Rupununi (Post Darwin) This section of the training complemented all other aspects of the training. Through the stakeholder analysis key stakeholders; persons that can impact decision making in the North Rupununi wetlands were identified. These persons it is believed will be key in the continued monitoring of the wetland sites after the Darwin Initiative Project comes to an end. The training in itself was aimed at developing the social capital of the participants that will in turn positively impact the capacity of the North Rupununi to monitor and manage the wetland and other resources. The need to further strengthen community participation was supported by the outlining of a community based field manual on monitoring, which is essentially a simplified version of the more technical field manual. This will allow for communities to implement monitoring programmes for various components that are important, in terms of the wetland sites. Is it developed or underdevelopment and when is it proposed to be implemented
- **8. Stakeholder forum in Georgetown** A stakeholder forum was scheduled for the 27<sup>th</sup> January, upon the completion of the training. However, it was cancelled as a consequence of the severely flooded conditions in Georgetown and coast line. The forum was set to target the key agencies and individuals that are important in the North Rupununi wetlands, and in the current, and future uses of the resources. The forum would've also allowed for the various stakeholders to contribute to the future of the project. The forum will be rescheduled for a time subsequent additional community visits by the team in April.
- **9. Project management** At the end of each days training session trainees were asked to evaluate the performance of the tutors thus assisting the tutors in identifying their short falls of the day. This allowed for exchange of views and also contributed to the

development of the project. As the project progresses, in it second year, additional components are included and team members will have to ensure all aspects of the project is covered. Each member of the team, from Guyana as well as from the UK, were assigned individual task to which they would be responsible for ensuring that it is completed. This allows each member of the team to see their contribution towards the development of the project and the system that the project is trying to put in place.

## 10. Training Participants & Facilitators

- 1. Vanda Allicock Wetland Assistant (Surama)
- 2. Malizya Hamilton –Wetland Field Assistant (Arapanputa)
- 3. Delano Davis Wetland Field Assistant (Toka)
- 4. Orville Davis Wetland Field Assistant (Toka)
- 5. Dexter Torres Ranger/Wetland Field Assistant (Iwokrama/Wowetta)
- 6. Lakeram Haynes Ranger/Wetland Field Assistant (Iwokrama/Rewa)
- 7. Nigel John Ranger (Conservation International)
- 8. Elvis Joseph Ranger (Conservation International)
- 9. Hendrick Simon Ranger (Conservation International)
- 10. Deirdre Jafferally Wetlands Field Researcher (Iwokrama)
- 11. Hemchandranauth Sambhu Wetlands Field Researcher (EPA/Iwokrama)
- 12. Aiesha Williams Wetlands Field Researcher (Iwokrama)
- 13. Indranee Roopsind Wetlands Field Researcher (Iwokrama)
- 14. Calvin Bernard Stakeholder Coordinator, M Sc Student.

## **Facilitators**

- Dr. Andrea Berardi (Open University)
- Dr. Jay Mistry (Royal Holloway University of London)
- Dr. Matthew Simpson (Wildfowl and Wetlands Trust)