

## The Rufford Small Grants Foundation

### Final Report

-----

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole**

**Grants Director**

-----

#### Grant Recipient Details

<b>Your name</b>	Alejandro Espinoza Tenorio and José Alberto Zepeda Domínguez
<b>Project title</b>	A proposal for the spatial planning of two traditional fisheries in competition; Huaves and Zapotecas
<b>RSG reference</b>	09.10.08
<b>Reporting period</b>	01.04.2009 – 31.03.2010
<b>Amount of grant</b>	£5800
<b>Your email address</b>	<a href="mailto:espinatenorio@hotmail.com">espinatenorio@hotmail.com</a> ; <a href="mailto:joalzedo@hotmail.com">joalzedo@hotmail.com</a>
<b>Date of this report</b>	11.10.2010

**1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To gather the Traditional Ecological Knowledge (TEK) that can be used in the fishery management			<b>X</b>	We made a complete collection through the interviews and exhaustive fieldwork the TEK in the Huave Lagoon System (HLS) regarding to local fisheries (resources, distribution areas, fishing gears, etc.) and the lagoon ecosystem dynamic (direction and periodicity of currents and winds, climate change, bathymetry, etc.). Large part of this knowledge was register both in Spanish as the dialects Zapoteca and Huave, this last in its five variants for each municipality (Santa María del Mar, San Mateo del Mar, San Dionisio del Mar, and San Francisco del Mar).
To know the traditional administration system			<b>X</b>	Being respectful of traditional customs, we reached a robust understanding of the local administration system assisting to workshops, communal and fishing cooperative meetings, and interviews with key informants.
To discuss the interviews outputs and to develop agreements about the ecosystem regarding fisheries issues		<b>X</b>		We carried out at least one oral presentation in each community (8) to discuss our first outputs with the fishermen. However, local confrontation among communities inhibited to reach consensual agreements to the entire HLS.
To digitize spatial information		<b>X</b>		We used Geographic Information Systems to design an inclusive spatial assignation representing the actual different social interests in the HLS. However, adverse social conditions were not conducive to further develop of our spatial proposal.

To identify the processes that have had negative or positive effects on the fisheries management			X	A complete description of the problematic of local fisheries management was generated (see Annex I).
To distribute the results between local people and authorities			X	We gave out 23 posters to the fisheries cooperatives and groups of fishermen, key informants (teachers, ex-leaders), one university (UMar) and the federal (Federal fisheries research center) and state stakeholders (Annex II).
To obtain official data bases for decision makers, national and international		X		We obtained plenty cooperation from state authorities. However, although we presented our academic goals, some federal authorities gave us no information because they distrusted about how the fisheries data can be used.

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

We faced some unexpected difficulties however, as was pointed out above, we could sort them out. Although some problems postponed the work (e.g., large distances, isolation of some localities, etc.), the most significant difficulty was the impossibility to bring together leaders from the two ethnicities. To resolve this disjunctive, we changed the methodology. Instead of leaders meetings, we travelled to the localities, where we worked out with the leaders on the poster, which was the medium to get the wide range of positions—some contradictory— on resources management. Other adjust was the replacement of the person in charge of the local technical support, (Fish. Ing. Adriana Machorro Tlaxcalteca) who had to attend personal health priorities, by Amos Reyes, a young and enthusiastic student of Fisheries Engineering who is native of the zone and was able to take the Adriana's position.

**3. Briefly describe the three most important outcomes of your project.**

- We were able to work out our research and thus to request the TEK that is useful to take management decisions in one of the most troubled fishing zones of the country. It was possible being respectful of the traditional organisational system (strong local authority and high sense of resources possession) and summing expertise and capacities through multi- disciplinary and

institutional work (*Universidad del Mar, Universidad Autónoma de Baja California, and Center for Tropical Marine Ecology*).

- We found out that the current resources management in the HLS is mainly operating through local organisations with profound knowledge of their natural resources but dealing with immediate needs; whereas external authorities (federal and state) and their long-term planning have barely influence. Consequently, fundamental challenges and their planned and structured solution are not attended: pollution problems by no regulated urban and agriculture discharges, high rate of sedimentation by deforestation in watersheds, lack of coordination in new projects of resources management (e.g., wind energy), and so forth.

- The poster and oral presentations were useful as tools of environmental education, as well as to integrated traditional knowledge into modern coastal management. In an area with low levels of schooling, and, therefore, written reports are rarely read, the data display demonstrated to be an excellent means of transmitting ideas and information. In this way, fishermen could visualise the area, resources, and knowledge that sharing with the rest of the communities.

**4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

We believe the contributions of our work can be helpful to a regional discussion about the marine resources management. The design of an inclusive consensual spatial assignation representing the current social interests in the HLS should bring elements to improve local governance arrangements.

**5. Are there any plans to continue this work?**

Yes. With the idea to impulse a better capacity building of natural resources, we trained to the local coordinator, as well to two students (Diana Sanchez and Eliel Ramirez). We are sure they are capable to continue the work. To increase awareness of common problems and to register original fisheries systems (e.g., fishery with skit) could be potential future goals.

**6. How do you plan to share the results of your work with others?**

We planned the distribution of our findings in two ways: local users and academic arena. Our main concern is sharing our outputs between the local community, fisheries authorities, and public not-specialised. At the moment, we have been developed and delivered in the zone one short-contribution in a poster (Annex III) and a regional journal (Annex IV). During the fieldwork was also carried out intensive efforts to communicate our results trough preliminary reports, workshops, and interviews with fishermen and local authorities. By other side, in the academic arena, we are working out two theses (Master-José Alberto Zepeda will be ready December, 2010 and PhD-Alejandro Espinoza will be ready Februar, 2011) and one paper in an international journal.

Additionally, we presented our work in the regional university (UMar) and partial results will be showed in a national<sup>1</sup> and international<sup>2</sup> conferences specialized in resources management.

**7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?**

The length of the project (6 months) was not modified. Through complementary support, we began the project according to our original budget distribution (from February to July of 2009). Technical problems with RSG conducted us to limit the use of its budget to the last four months of the project (from April, 2009).

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

Item	Budgeted Amount (1 Pound = 22.17 Mexican pesos)	Actual Amount	Difference	Comments
<b>Work in communities</b>	1,000	1,000	0	
<b>Field work</b>				
- Per diem expenses for three people <sup>(1)</sup>	1,000	1,000	0	
- House rent	550	550	0	
- Local transport	300	400	-100	
- Regional transport	200	350	-150	
<b>Consumable</b>	100	100	0	
<b>Equipment</b>	200	200	0	
<b>Informative mediums</b>				
- Poster	350	350	0	
- Triptychs	250	0	250	

<sup>1</sup> Espinoza-Tenorio A., Zepeda-Domínguez J.A., Reyes A., Serrano-Serrano S.J., Espejel, I., Hernández C. and S. Castillo. 2010. The Geographic Information System and the Traditional Ecological Knowledge; A participative planning of the Fisheries in the Huave Lagoon System, Mexico. Poster. II Reunión Bianual de la Soc. Mex. de Pesquerías y Capitulo Mexicano de la AFS. Ensenada, México.

<sup>2</sup> Fuentes PM, Espinoza-Tenorio A, Espejel I, Alcalá GG. The current management implications of the socioeconomic context in three artisanal fishery systems in Mexico. Ponencia en el "International Marine Conservation Congress". Washington D.C. 19 – 24 Mayo, 2009

Salary	750	750	0	Amos Reyes
<b>Students support</b> - Two scholarships	600	600	0	-Diana Sánchez, in charge of edition  - Eliel Ramirez; in charge of data register
<b>National and international travel</b> - J.A. Zepeda: La Paz-Huatulco-La Paz - I. Espejel: Tijuana-Huatulco Tijuana	250 250	250 250	0 0	
<b>TOTAL</b>	5,800	<b>5,800</b>		

#### 9. Looking ahead, what do you feel are the important next steps?

We consider our project has successfully collecting scientific and empirical information necessary to design a spatial fisheries planning in the HLS. Thus the next steps should be to carry out work oriented to the take of conscience that most of the problems in the zone are common and, therefore, the solutions depend of consensus. To overcome the ethnical confrontations, projects to reinforce institutions in charge of local coordination are also priority.

The current scenery in the HLS presents a unique opportunity because the deterioration of natural resources has led the people to be aware of the need for new arrangements. To try to reverse the trend of deterioration, people are taking advantage again of their traditional knowledge of the natural resources and their ancestral alliances between cultures. They are looking for a wise balance between resources and people.

#### 10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes. We showed the RSGF logo in all academic and communal workshops and posters. Additionally, we thanked the RSGF support in the "Acknowledgements" section of the theses, papers, and national and international congress.

#### 11. Any other comments?

We would like to express our utmost sincere gratitude to Rufford Small Grants Foundation for your help in making true this project.