

# Geography with Impact



UNIVERSITY OF  
**WINCHESTER**

## Knowledge Transfer, Stakeholder Engagement and Public Outreach.

Tristan Berchoux

# What is Impact?

## Economic and Social Research Council.

### Academic

- Shifting understanding
- Advancing methods, theories and application

### Economic and Societal

- Contribution to society and the economy
- Benefits to individuals, organisations and nations

**Instrumental:** influencing the development of policy, practice or service provision, shaping legislation, altering behaviour

**Conceptual:** contributing to the understanding of policy issues, reframing debates

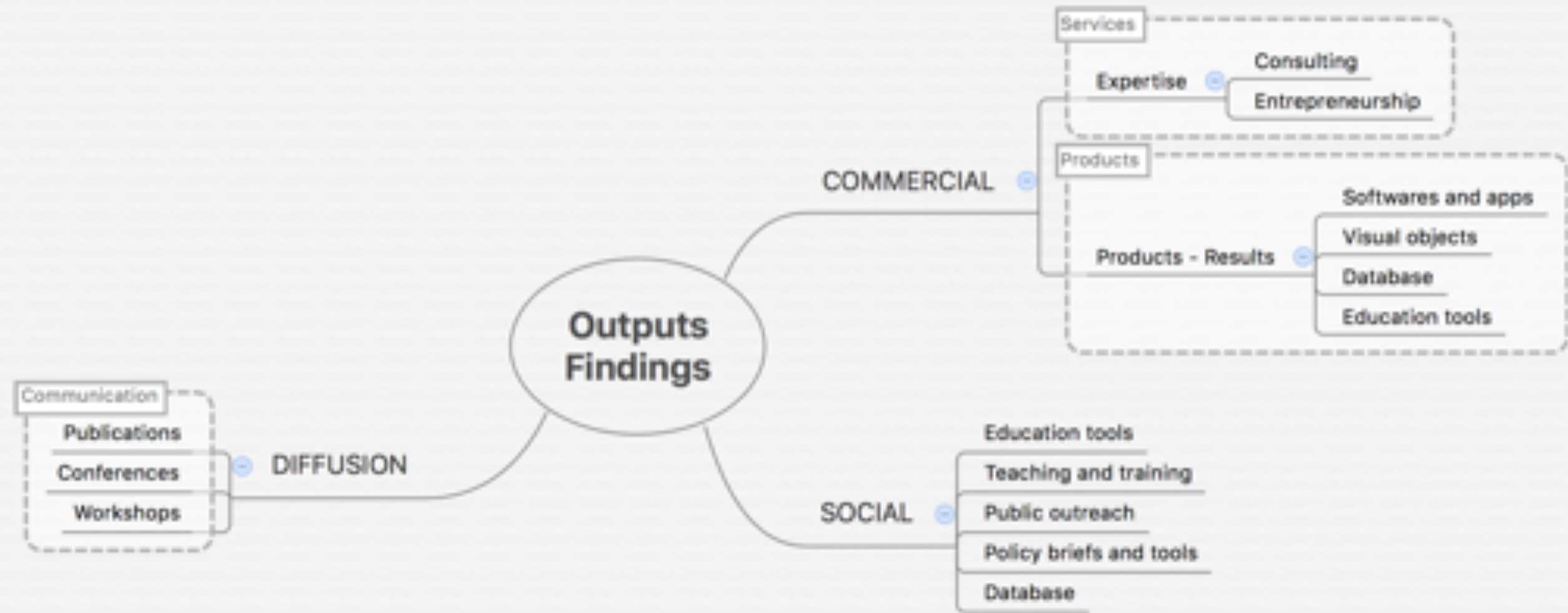
**Capacity building:** through technical and personal skill development.



# Knowledge Transfer



# Knowledge Transfer for Social Sciences.





# Project

```
graph LR; Project --> ID[Identification]; Project --> Protection[Protection]; Project --> Strategy[Strategy]; Project --> Maturation[Maturation]; Project --> Extension[Extension];
```

Identification

Protection

Strategy

Maturation

Extension

# Case Study



# Case Study







MARECO

Patent

©

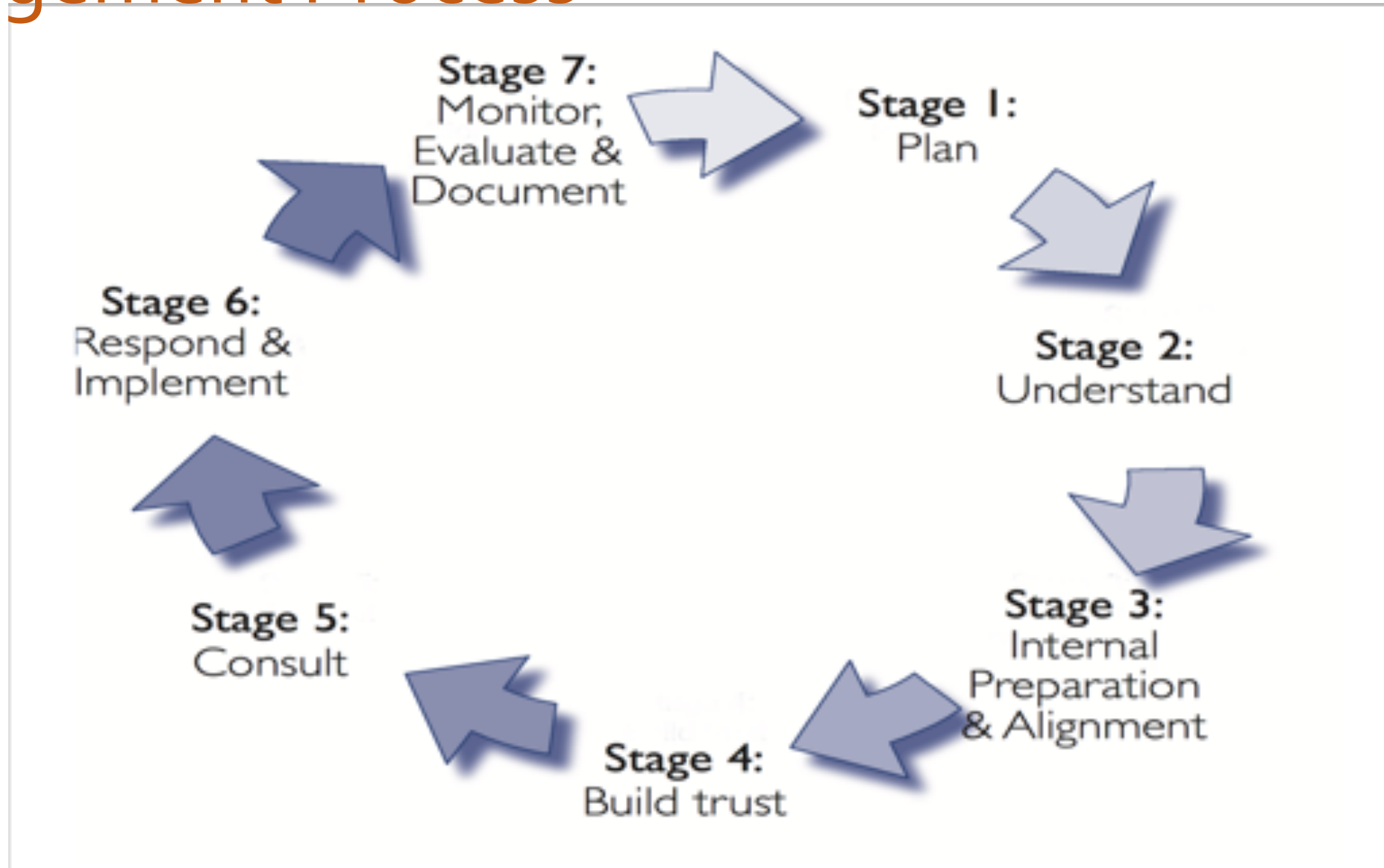
©





# Stakeholder Engagement and Influencing Policy

# Engagement Process

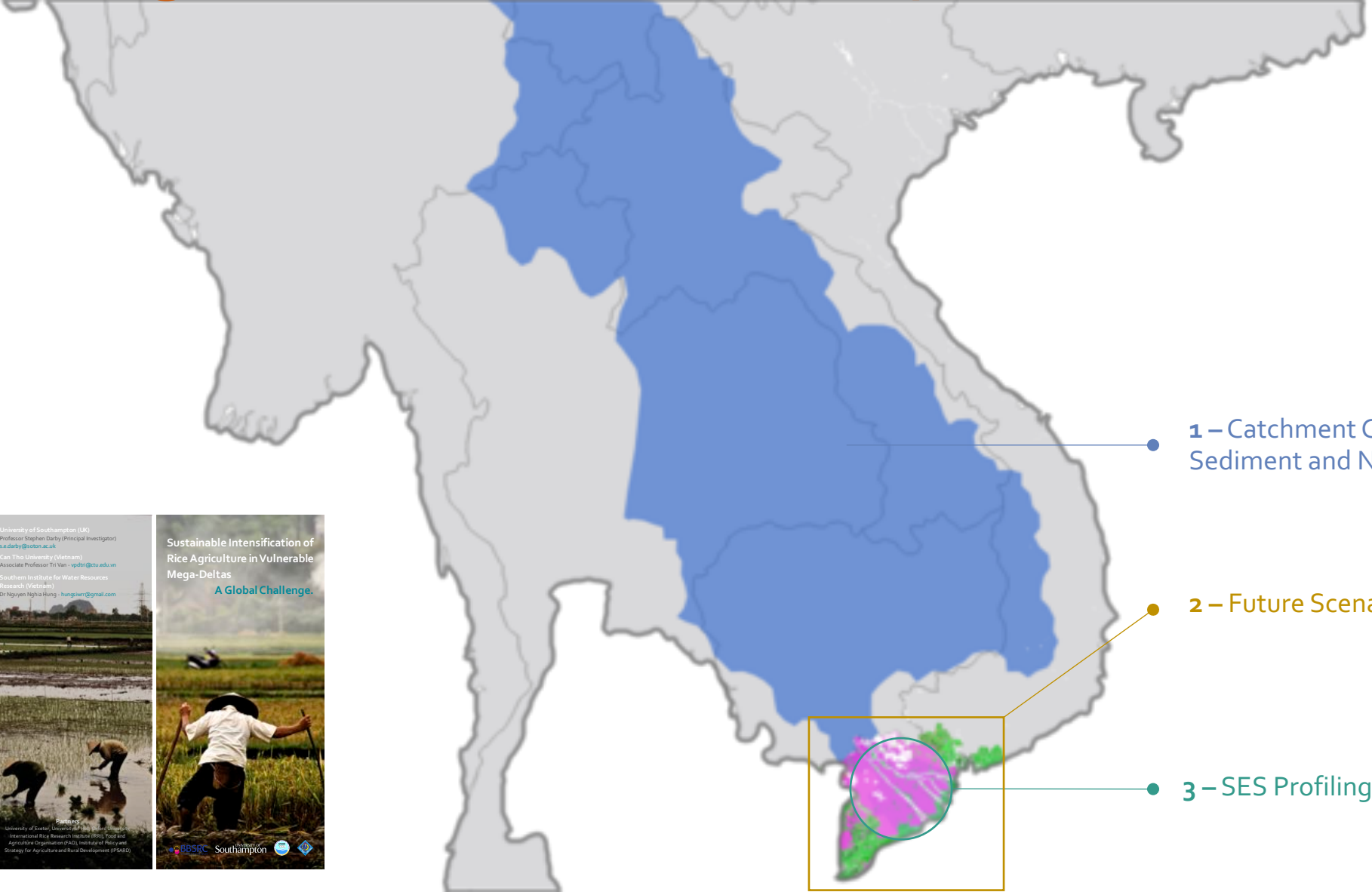




# Stakeholder Mapping and Buy-In Identification



# Initiating Stakeholder Participation



1 – Catchment Controls on Sediment and Nutrient Fluxes

2 – Future Scenarios

3 – SES Profiling

**Project Aim**  
To establish a new international and multidisciplinary collaboration between UK and Vietnamese universities, international agencies and key end users that is capable of delivering new insights into the trade-offs between flooding, sediment and nutrient deposition, rice cultivation and associated livelihood strategies in the Vietnamese Mekong delta.



**Expected Outcomes**  
The project will lead to the concept-proofing of new modelling tools that can evaluate whether alternative water management and rice cultivation practices allow for sustainable intensification in terms of yield and socio-economic outcomes for different groups under environmental changes such as upstream impoundment, land use and climate change.

University of Southampton (UK)  
Professor Stephen Darby (Principal Investigator)  
s.darby@soton.ac.uk  
Can Tho University (Vietnam)  
Associate Professor Tri Van - vgdtr@ctu.edu.vn  
Southern Institute for Water Resources Research (Vietnam)  
Dr Nguyen Nghia Hung - hungnvn@gmail.com



**Partners**  
University of Central Vietnam (UCV), Vietnam University of Agriculture, Forestry and Fisheries (VAFU), International Rice Research Institute (IRRI), Food and Agriculture Organisation (FAO), Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD)

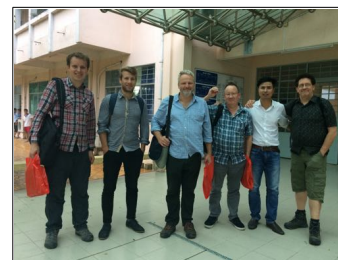
**Sustainable Intensification of Rice Agriculture in Vulnerable Mega-Deltas**  
A Global Challenge.



BRICS Southampton



# Strengthening Stakeholder Participation



Một số thành viên chính của nhóm nghiên cứu thuộc dự án BRAGS tham gia vào buổi họp khởi động dự án tại Đại học Cần Thơ.

## Khởi động dự án BRAGS tại Đại học Cần Thơ.

| Dự án “Xây dựng hệ thống nông nghiệp có khả năng phục hồi: sinh kế bền vững ở đồng bằng dưới sự thay đổi môi trường (BRAGS)” đã chính thức được khởi động tại Đại học Cần Thơ từ ngày 03 – 05/10/2017. Nhóm nghiên cứu bao gồm các nhà khoa học quốc tế từ các trường đại học khác nhau của Anh Quốc và Việt Nam (tiếp trang 2).

### MÔ HÌNH TỰ NHIÊN

#### Mô phỏng dòng chảy và chất lượng nước

Dự báo các tác động của thay đổi môi trường và thay đổi điều kiện khí hậu đối với Đồng Bằng Sông Cửu Long.

| Như một phần của dự án, chúng tôi cần hiểu được các tác động của lưu vực từ thượng nguồn sông Mekong lên vùng đồng bằng ở hạ nguồn, và để đạt được điều đó, chúng tôi đã tiến hành nghiên cứu mô hình lưu vực tổng hợp. Dòng chảy và chất lượng nước trong

tương lai sẽ biến động trong lưu vực dưới tác động của thay đổi sử dụng đất nông nghiệp, chặt phá rừng, dân số gia tăng, ô nhiễm không khí và thay đổi điều kiện khí hậu. Vậy làm thế nào để chúng tôi có thể dự đoán được những thay đổi này? (tiếp trang 2)

### MỤC LỤC CHÍNH

Khởi động dự án Đại học Cần Thơ p. 2

Mô phỏng dòng chảy và chất lượng nước sông Mekong p. 2

Xác định các vùng sinh kế chính ở Đồng Bằng Sông Cửu Long p. 3

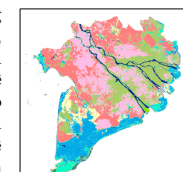
Trình bày về dự án BRAGS p. 4

### KHOA HỌC XÃ HỘI

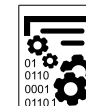
#### Đặc tính không gian của các hệ thống sinh kế

Xác định các vùng sinh kế đồng nhất ở Đồng Bằng Sông Cửu Long.

| Để mô phỏng tác động của thay đổi môi trường lên các hệ thống nông nghiệp và sinh kế nông thôn, chúng tôi cần xác định các loại hình hệ thống sinh kế khác nhau hiện có ở toàn đồng bằng. Mỗi hệ thống sinh kế biểu hiện khác nhau trước các áp lực môi trường và với tác động của các quy hoạch ở đồng bằng; do đó, cần thiết phải mô phỏng hệ thống sinh kế một cách chuyên biệt. Năm loại hình sinh kế được xác định dựa trên hình ảnh vệ tinh và dữ liệu thủy văn bằng cách sử dụng các kỹ thuật phân cụm không gian (tiếp trang 3).



### CÁC SỰ KIỆN SẮP TỚI



Tháng 12/2017  
Hội thảo về mô hình hóa  
©Anh



Tháng 01/2018  
Hợp các bên có liên quan  
©Việt Nam



Tháng 05/2018  
Hợp toàn thể lần 2  
©Việt Nam

## BRAGS News

### BAN BIÊN TẬP

T. Berchoux<sup>†</sup>, S.E. Darby  
t.berchoux@soton.ac.uk

Dự án được tài trợ bởi Hội đồng Nghiên cứu Khoa học Sinh học và Công nghệ sinh học trong khuôn khổ Giải thưởng tài trợ cho Nghiên cứu Hệ thống Nông nghiệp và Lương thực Toàn cầu.

# Delivering Outputs

Is the question **relevant** to the stakeholders targeted?

Define a key message.

Concise writing style: short and to the point.

Getting involved in the distribution.

## SUSTAINABLE RICE CULTIVATION IN THE DEEP FLOODED ZONES OF THE VIETNAMESE MEKONG DELTA

Policy Recommendations



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Southampton

UNIVERSITY OF  
Hull



UNIVERSITY OF  
EXETER





Public Outreach



# Organising Events and Branding

DECCMA  
▼ ▲ ▲ ▲

UNIVERSITY OF  
Southampton

Integrating fieldwork  
into modelling

- DECCMA Postgraduate Seminar Series -  
Seminar n°2



May 4, 2016  
10 - 12h  
Building 44 / Lecture Theatre B

DECCMA  
▼ ▲ ▲ ▲

UNIVERSITY OF  
Southampton

Adapting to the physical  
effects of climate change.  
DECCMA Postgraduate  
Seminar Series

Wednesday 29 April 2015  
Lecture Theatre A, Building 44  
Highfield Campus

Seminar commences at 14:00 followed by  
refreshments

All are welcome to attend  
Please contact:  
[J.Lawn@soton.ac.uk](mailto:J.Lawn@soton.ac.uk) to register for this event

DECCMA  
DEltas, vulnerability and Climate Change:  
Migration and Adaptation

- Morphological evolution and the sustainability of deltas in the 21st century *S. Spinney*
- Socio-ecological tipping points in world deltas *G. Cooper*
- Social enterprise and innovation in the GBM delta *Q. Waheed Uz-Zaman*
- Livelihood dynamics and food security under a changing climate *T. Berchoux*
- Modelling tropical cyclone resilience in the Mahanadi delta *M. Fanchiotti*
- Gender and adaptation in the Mahanadi delta *G. Prati*

[www.southampton.ac.uk/geography](http://www.southampton.ac.uk/geography)

DECCMA  
▼ ▲ ▲ ▲

UNIVERSITY OF  
Southampton

Integrating fieldwork into  
modelling.  
DECCMA Postgraduate  
Seminar Series  
Friday 6 May 2016, 10am  
Lecture Theatre B, Building 44 (44/1057)  
Highfield Campus

Humans and deltas: defining evolutionary pathways.  
*Amy Welch*

A visit to India to explore the coupled natural and anthropogenic  
drivers of fishery production across the Chilika Lagoon.  
*Gregory Cooper*

Using mixed-methods research to characterise livelihoods: on  
the use of qualitative fieldwork for quantitative modelling.  
*Tristan Berchoux*

Seminar  
commences at  
10:00am followed  
by refreshments.  
All are welcome to  
attend.  
Please contact:  
[J.Lawn@soton.ac.uk](mailto:J.Lawn@soton.ac.uk) to  
register for this event

DECCMA  
DEltas, vulnerability and Climate Change:  
Migration and Adaptation

[www.southampton.ac.uk/geography](http://www.southampton.ac.uk/geography)



# Communication

**Livelihood profiling and sensitivity of livelihood strategies to land cover dynamics and agricultural variability**

T. Berchoux<sup>1\*</sup>, C.W. Hutton<sup>2</sup>, G.R. Watmough<sup>3</sup>, F.A. Johnson<sup>4</sup>, P.M. Atkinson<sup>4</sup>

\*Corresponding author: [tristan.berchoux@sofon.ac.uk](mailto:tristan.berchoux@sofon.ac.uk)

**Click on the boxes if you want to learn more...**

**RATIONALE**

For rural households, whose livelihoods are mainly based on agriculture, a decrease in the area of land cultivated can have significant consequences on their livelihood strategies, thus on their livelihood outcomes. However, it is still unclear how changes in cultivated area and agricultural productivity influence households' livelihood strategies, including community capitals and households' livelihood strategies.

This study investigates how agricultural unpredictability relates to livelihood systems.

**CASE STUDY**

The majority of Odisha's population depends directly or indirectly on agriculture for their livelihoods (50%), which means they are highly exposed to climate variability.

**METHODS**

**AGRICULTURAL LIVELIHOODS VARIABILITY**

This study combines together earth observation from space, national census and participatory qualitative data into a community-wide analysis of the relationships between predictability in agricultural production and livelihood capitals.

**RESULTS**

**AGRICULTURAL PREDICTABILITY**

There is a relationship between the set of livelihood capitals a community has access to and the level of predictability of their agricultural production based on climate indicators. It is argued that climate-crop yield models should integrate frameworks from both climate and social sciences to take into consideration the actions of communities in their environment, which modifies the impact of climate on ecosystems.

**LINKS WITH SDG**

This approach provides a new lens to inform policies on the role of livelihood capitals for poverty reduction and produces new insights for early warning of crop failures and for sustainable development in rural areas of the Global South.

**FRAMEWORK**

This research uses an adapted version of the Sustainable Livelihood Framework to characterise livelihood systems.

**ABOUT**

If you want to learn more about the team and about our research project.

**Logos:** CC BY, University of Southampton, SOFON, Ghent University, Aarhus University, Lancaster University, DECMA, Work carried out within, Financial support from IDRC, CRDI, Canada, UKRI.

**TROPMET 2016**  
National Symposium on Tropical Meteorology: Climate Change and Coastal Vulnerability  
18 - 21 December, 2016, Bhubaneswar, Odisha, India

Organized by



This Certificate of Appreciation is Awarded to

*Tristan Burchaux*

for his/her Contribution for Invited talk, Technical Presentation, Poster Presentation  
in TROPMET 2016, "National Symposium on Tropical Meteorology: Climate Change and Coastal Vulnerability"  
Organized by Indian Meteorological Society, Bhubaneswar Chapter,  
in collaboration with Government of Odisha and Odisha Sahasra Shiksha Mission, Bhubaneswar, India  
Under the Auspices of Indian Meteorological Society, New Delhi

  
Dr. Ash Tiagi, Co-Chairman  
National Organizing Committee  
& President IMS, New Delhi

  
Prof. U. C. Mohanty  
Chairman  
Scientific Steering & Publication Committee

  
Dr. S. C. Saha, Convener  
National Organizing Committee  
& President IMS-Bhubaneswar Ch.

# Spatial distribution of livelihoods in the Mahanadi Delta, India

T. Berchoux<sup>1\*</sup>, F. Amoako Johnson<sup>2</sup>, C. Hutton<sup>3</sup>

**Abstract**  
A quantitative approach was used to assess the spatial distribution of livelihood activities in the Mahanadi Delta, India. The objectives of this study were to highlight spatial patterns of livelihood activities and to map their links with resources.

**The Sustainable Livelihood Framework**  
Livelihoods have evolved over time. This framework can be modified by the institutions, social networks and opportunities at household and regional levels. Assets include Human capital, natural assets, financial assets, social assets and physical assets. Outcomes represent the security of access to well-being by its location through a different range of livelihood strategies.

**MATERIALS AND METHODS**  
The Census of India, 2011 is the main source of high-resolution data on demographic, social and economic indicators widely available in India.  
Livelihoods were classified based on six in-depth participatory workshops conducted in 16 communities and an extensive review of the literature.  
An inventory tool for the livelihoods was constructed to identify the number of dimensions. Each component represented a set of variables described in the following table.  
Results presented below are summary maps of each capital at the community level. Details of the components are shown in adjacent tables.

**SPATIAL DISTRIBUTION OF LIVELIHOOD CAPITALS AND ACTIVITIES AT THE COMMUNITY LEVEL**

Physical capital refers to the economic infrastructure and assets that enable households to pursue their livelihood. Physical economic infrastructure encompasses communication facilities, accessibility networks, housing conditions, access to drinking water and so on.

Natural Capital  
Natural capital refers to the physical environment and to the natural resource available to the household that can be used or enhanced their livelihoods. It includes land, water resources, forest products, wildlife, biodiversity and any environmental services.

Social Capital  
Social capital refers to any social network connection of the household and its quality. That is to say its reciprocity and trust or its quality to do resource sharing. It is one of the most difficult capitals to quantify as its definition is broad and subjective. However, it was possible to proxy social networks via a in-depth qualitative research conducted with the communities in the Delta.

Financial Capital  
Financial capital refers to the financial resources of the household. It includes savings, credits, remittances but also any productive assets that is held as a store of value.

Human Capital  
Human capital refers to the knowledge and capabilities possessed by the individuals who live in one household. Their health status is also included because it determines the capacity of individuals to acquire their capabilities to enhance livelihood activities. As a summary, human capital encompasses access to health education services and the working force.

**Livelihood Activities**  
ON-FARM  
OFF-FARM  
UNEMPLOYED

**DISCUSSION AND IMPLICATIONS**  
Coastal agricultural and low-dependency cities  
Divides off-farm activities if high natural capital  
Divides off-farm activities if high human capital  
Divides off-farm activities if high physical capital  
Lowest agricultural area and coastal-based  
Divides off-farm activities if high human capital  
Divides off-farm activities if high physical capital  
Power supply and integrated  
Means of transportation  
Livelihood activities provide a framework for understanding of local vulnerability and adaptation to climate change  
Local analysis and mapping of livelihoods provides a framework for understanding of local vulnerability and adaptation to climate change

**Authors' affiliation**  
<sup>1</sup>Geography & Environment, University of Southampton  
<sup>2</sup>Social Statistics & Demography, University of Southampton  
<sup>3</sup>Centre for International Development, University of Southampton  
<sup>\*</sup>\*Corresponding author: T.Berchoux@soton.ac.uk

### Conducting fieldwork in a highly stratified society

👉 LEAVE A COMMENT

- On the use of participatory visual methods to engage with the marginalised within Indian rural communities

*by Tristan Berchoun*

### Social issues in rural India

inequalities are omnipresent within Indian rural communities. They are perpetuated by the system of castes, which leads to a social stratification of India's population. Moreover, vulnerability to external stresses is also driven by gender discrimination, which follows on from the systemic marginalisation of women and the differences of power relationships that exist between men and women, especially in India. In order to get an overview of communities, social scientists have to face the challenge of getting access to the views of such marginalised groups. This blog presents some of the methods I implemented to address this issue during a research fieldwork conducted in the Mahanadi Delta in India during winter 2016.

### Methods to get the voices of marginalised groups out

As part of our work associated with the characterisation of livelihood dynamics under the threat of external stresses, we've conducted an in-depth fieldwork in the Mahanadi Delta in India. First, the fieldwork team interviewed members of governmental agencies, NGO representatives and academics in Bhubaneswar. Then, the team spent 6 weeks conducting Participatory Rural Appraisals (PRAs) in 10 rural communities in the Districts of Nayagarh, Puri, Jagatsinghpur and Kendrapara, spending 2 to 3 days in each community. Participatory Rural Appraisal (PRA) was chosen as the main method for creating primary data as it enables rural communities to share, enhance and analyse their knowledge of life and condition. Different activities were used to cross-check the data collected and to cover all the aspects of livelihood systems, such as wealth ranking, seasonal calendar or community mapping. The PRAs were conducted by one researcher with the help of a translator and a facilitator who were trained before conducting the activities. The researcher monitored the evolution of the PRA and provided guidance to the translator and facilitator.

### Implementing PRA in a class and gender-based structure

Focus groups conducted for each PRA activity were purposely held separately between men and women to capture gender differences and to give women, who suffer from a lack of recognition in India, the opportunity to express their opinions and issues. It enabled the women to express their opinions in an environment free from the power pressure of men, focus groups being conducted by a female translator. In some communities, implementing such an approach raised discussions amongst men, many arguing that "women should not be consulted because they don't know anything". This example of the social pressure existing between genders was also felt between castes and we also conducted PRAs with Scheduled Castes (SC) and Scheduled Tribes (ST) separately. This enabled us to gain access to the opinions of women and socially marginalised groups.

### Photovoice to increase participation during FRAs

However, we were also confronted to the 'habitus' of social stratification: even with homogenous groups of socially marginalised groups (women, SC/STs), it appeared to be sometimes difficult to animate the focus group and to co-create the primary data. This lack of participation can be explained by the fact that such groups cannot express their opinions within the community and this pressure remains during focus groups. In order to get round this issue, we decided to add another activity during the FFGs. This activity, called photovoice ([www.photovoice.org](http://www.photovoice.org)), is a participatory visual method that uses photography to initiate discussion within the focus groups. After a one-hour training course and the identification of a theme ('household and community assets that are important for their livelihoods'), participants were given a camera each for two days so they could document the theme. After the two days, we met in a focus group to review the photos and discuss them. This method was a real success and marginalised participants (women, SC/STs) got very involved. It led to very interesting discussions that had not been tackled within the previous activities and was a successful way to get the opinions of such groups out.

### Conclusion

As a conclusion, it is necessary to extend the range of methods used in social sciences in order to capture the diversity of opinions that exist across the different social stratum within communities. As an example, we successfully used the visual method Photovoice to initiate discussion and get the opinion of marginalised groups such as women and scheduled castes and tribes. The challenge now is to incorporate such methods in vulnerability assessment and to take such groups into account in the





# Pathway to Impact

## Setting Objectives

- What are the likely outcomes of this project?
- Who will benefit from this project?
- How will they benefit from this project?
- How can you involve potential beneficiaries in this project
- How will you know if it has made a difference?

## Developing Messages

- Clear and succinct messages that summarise your project

## Targeting Audiences

- Choosing your audiences
- Reaching your audiences

## Achieving your impact objectives

- Detail of activities

## Evaluation

The screenshot shows the website of the Economic and Social Research Council (ESRC). The header includes the ESRC logo and the tagline 'Economic and Social Research Council Shaping Society'. A search bar is located in the top right. A navigation menu at the top lists: Home, Funding, Research, Collaboration, Skills and careers, Public engagement, News, events and publications, and About us. Below this, a breadcrumb trail reads: Home > Research > Impact toolkit > Developing a communications and impact strategy. The main content area is titled 'Developing a communications and impact strategy' and includes a 'Share' button with social media icons. The page content describes the importance of communication and impact strategy, mentioning a step-by-step guide and advice on planning and prioritising activities. A sidebar on the left lists various resources under the 'Research' and 'Impact toolkit' categories.

**E·S·R·C**  
ECONOMIC & SOCIAL  
RESEARCH  
COUNCIL

Economic and Social Research Council  
Shaping Society

search

Home Funding Research Collaboration Skills and careers Public engagement News, events and publications About us

Home Research Impact toolkit Developing a communications and impact strategy

**Research**

- Our research
- Research topics
- Impact toolkit**
  - Support from your research organisation
  - What is impact?
  - Developing Pathways to Impact
  - Developing a communications and impact strategy**
    - Step-by-step guide
    - Measuring success
  - Tips for doing knowledge exchange
  - Branding

**Developing a communications and impact strategy**

This section is about maximising your communication and impact. Your communications and impact strategy is a more comprehensive plan to achieve and maintain your outlined Pathway to Impact made at the application stage.

This section includes a step-by-step guide which takes you through each stage of the process, including setting objectives, developing key messages, identifying your audience and getting them involved and measuring success.

It also gives advice on planning and prioritising activities and allocating sufficient resources for them.

Opportunities for making an impact may arise at any stage during or after your research project. It is important that you have a strategy in place so that you can increase the chances of such opportunities occurring and are able to take advantage of them when they do.

- Step-by-step guide
- Measuring success