

## **UW Worldwide Research Projects for 2008-09 Simplified Proposals**

### **LCA Project:**

The first project is an Ecodesign Project focusing on Building Materials and Chemical Products. The building materials portion of this project would have lots of intersections with the CORRIM project at UW that is currently in its 2<sup>nd</sup> or 3<sup>rd</sup> phase. The Ecodesign portion of the project is focused on creating methodology and tools for developing environmentally sound architecture specific to China. This is supported by two interacting projects. The first, of course, is producing a Life Cycle Assessment for all the building materials used in China and creating tools and a database to facilitate this activity. The second project is producing EPD (Environmental Product Declaration) Type IV for all the building materials that would be used in the Ecodesign process. The EPD's would draw their certification from the LCA database that is currently being started. The LCA database will also be used in the development of methodology for the Ecodesign portion of the project. This project will be running between 2007-2010 and other than having University support is jointly being worked on by CNIS (China National Institute of Standardization), China Technology Center, and the China Environmental Certification Center run by SEPA.

The second project's structure will be developed similarly to the Ecodesign Project described above, except that this project will be strictly about building materials. It is titled Promoting Sustainable Consumption and Production of Building Materials in China. This project will be supported by TU Berlin (Technische Universität Berlin) and AUB (Arbeitsgemeinschaft Umweltvertragliches Bauprodukt E.V., a sustainable building company in Germany, <http://www.bau-umwelt.com/>) who will be helping to develop the certification methods for EPD's here in China. The university will also be working closely with the Institute for Environment and Sustainability run by the Joint Research Center in the European Commission. While, this project is entirely similar to the one mentioned above it should be noted that the input from foreign institutions will be provide a strong influence on the project. It may even be interesting to consider just researching the difference between the two projects to see which one is more efficient (i.e. is it better or worse for the Chinese to enter into these kinds of projects with foreign help)

The simplified goal of both projects is to work with multiple companies throughout China to produce an LCA database for all types of building materials. This will then be used to provide EPD's to those companies who plan to supply material to Ecodesign projects currently being developed around the country. Students themselves can work with Professor Wang on anyone of the aspects noted above, and if they need more information on this projects I'm sure he'd be happy to accommodate.

## **Microfinance Project:**

The goal of this project is to create a multidisciplinary team of students and professors to research the intricate Microfinance System that is becoming very prevalent in China. Both students and professors will come from the University of Washington's UW Worldwide Program and Sichuan University's Honors School. Our approach is to have an international team collaborate to develop: 1) a solid understanding of microfinance's ability to alleviate poverty in China with a focus on Southwest China, 2) a comparison between the rural-urban disparity in regards to Microfinance in China, 3) a comparison between China's Microfinance System, its successes and failures, to that of other parts of the world, 4) field research sites where teams can gather data that will support individual and collective research in this project, 5) possible internships where students will be able to gain hands on experience dealing with practical problems in the field of Microfinance.

The Project has four research focus points that will provide and/or receive support from concepts mentioned above: 1) The affects of Public Policy on Microfinance, 2) Civilian and other non-governmental organizations input into Economic Development, 3) Theoretical Economics with special focus on informal finance and Microfinance opportunities, 4) Sociological Aspects of Microfinance, Costs and Benefits.

Regarding the four research areas students should feel comfortable in developing their own interests. There are certain issues that are prevalent in each of these areas.

### **1) The Effect of Public Policy on Microfinance**

China is of course well known for its very special political situation, and the case of Microfinance is no exception. Whereas in many countries Microfinance tends to be fairly free of government intervention, in China the government has implemented very strict regulation up the market. The effects of this regulation are still very much a point of interest and a serious question that needs to be answered. The main aspect of this research would be to do a thorough examination of the Rural Credit Unions (农村信用社), which do exist in cities as well)

### **2) Civilian and other non-governmental organizations input into Economic Development**

Across the globe NGO's have been extremely prevalent in promoting Economic Development, especially in Micro-projects. China's own NGO circles are truly in their infancy when compared to the armies of foreign NGO's that are seen across the country. Generally speaking, civilian organization in China, especially rural areas, is all but unheard of due to the political climate. Microfinance is beginning to offer new opportunities for rural areas to organize their own civilian designed and managed organizations. Obviously, these organizations are still heavily influenced by government policy. Still the interesting aspect of this topic is whether or not these organizations are effective in helping rural areas alleviate poverty. There are many ways to approach this question, including looking at the success of these organizations in funding Education, Agriculture, Construction and even Entrepreneurial Ventures, as well as many more.

### **3) Theoretical Economics with special focus on informal finance and Microfinance opportunities**

This aspect of the project will require a strong background in microeconomics. China has imposed very low interest rates upon all of the Microfinance organizations private and public. This, along with other unique methodology, is in direct contrast to many of the concepts of Bangladesh's Grameen Bank that have been seen as tested and true. While the Economic theory behind Grameen and other Microeconomic institutions have been deeply researched, many of these theories have yet to be tested in China's Microeconomic Environment. Many of the individual research projects involved with this project will be helpful in developing a database of Microfinance information for China (specifically SW China). From this data we can use Econometrics and Microeconomic theory to extrapolate which programs are the most effective. With new findings it is even possible for students to work with Professors on developing their own theory on how Microfinance works in China.

### **4) Sociological Aspects of Microfinance, Costs and Benefits.**

Political and Economical issues aside, there are numerous Sociological issues that are involved with Microfinance. Most prominently associated with Microfinance is its focus on helping women become less dependent on their husbands or families. General improvement in Education and Health levels of the rural poor has also always been a larger goal of Microfinance institutions. In fact there are various questions yet to be unanswered regarding Microfinance's impact on sociological issues. If students did want to look at these questions from an economic point of view, using Cost/Benefit Analysis to examine these issues could be very valuable to the project as a whole.

## **Jiuzhaigou Project:**

### **Population ecology of *Fargesia nitida* in Jiuzhaigou**

The below is the project that Prof. Zeng has funding for regarding the population of local bamboo. From talking with Prof. Zeng and Kemo, this project does have large impact on the park because of the ecological affect it has on the pandas that live just on the others side of the mountains in the Wanglang nature reserve. The objectives were taken from the document provided to me by Tang Ya back in Jan. In talking with Zeng Laoshi these simplified objectives do seem to be the way he would like to take this project.

#### **Objectives of Research**

- (1) Understand basic features of the population ecology of *Fargesia nitida*;
- (2) Understand the regeneration status of *Fargesia nitida* in different communities after it blossomed between 1983 and 1985;
- (3) Put forward possible factors which may influence the restoration of *Fargesia nitida* population, which serves as the scientific foundation for next step and thus will help determine the specific influential factors in long run; and
- (4) Set up permanent plots and carry out long-term investigation on the population dynamics of Panda's food (*Fargesia nitida*).

### **Research on the explication of cultural relics in Jiuzhaigou**

This is the project which will be overseen by Li Laoshi. This project is not simply an archeological project; there are many anthropological aspects, that were started by Barbara Grub and others during the IGERT projects, which can be probed deeper. Having students obtain a greater understanding of local Jiuzhaigou culture can help put the archeological finds into a historical context. This will also include learning about the cultures which surround Jiuzhaigou as well and learning about their inter-cultural relations.

#### **Main Research Activities and Research Objectives**

- (1) Determine the time scale of human history in Jiuzhaigou area;
- (2) Explore ancient human-nature relationship, based on the cultural relics and natural samples in Jiuzhaigou;
- (3) Restore the ethnic attributes and social group composition of ancient people;
- (4) Explore relationship between production modes (both agriculture and husbandry) of prehistoric people and their natural environment;
- (5) Study geological and geomorphologic change of Jiuzhaigou area since Holocene;
- (6) Study ancient culture exchange between Jiuzhaigou and the bordering Ganqing area and the upper reaches of the Minjiang River;
- (7) Relate Jiuzhaigou people's culture to their ethnic attributes;

## **Sustainable tourism development in Jiuzhaigou: from a landscape perspective**

While there may not be a specific Prof involved with this project, all of the resources to support the research are definitely in place. This project will definitely build on the objectives that both DJ and Jamie have worked on in the past. Also this project is greatly supported by many people at the Park's Science Department, including Kemo. One important thing to note is that this project will require use of GPS equipment since both DJ and Jamie have spent little time mapping the areas that would be need to create an efficient model. The surveying and ethnography that have been conducted by DJ and the IGERT groups have created a good basis for this project but there are certainly places where we could use more information.

### **Objectives of Research**

- (1) Put forward effective landscape-ecological regulation measurements to mitigate the impacts of tourism development;
- (2) Develop a sustainable tourism development model of Jiuzhaigou, which directs to a new tourism development mode based on the change of landscape pattern; and
- (3) Set up a model for predicting the landscape change of Jiuzhaigou and providing corresponding landscape management strategy, which will shed new light on the sustainability of Jiuzhaigou.

## **D.C. Graham Archives:**

D.C. Graham was an American missionary, educator, explorer, ethnographer, and scientist. He taught at West China University in Chengdu, a school that was founded and operated by American missionaries. While there, he founded the Museum. When Sichuan University absorbed West China University after 1950, the museum became the Sichuan University Museum.

It should be noted that while D.C. Graham is a central figure in these historical archives, 19 recently rediscovered trunks of material found in the Sichuan University Museum, the bulk of the information is actually focused on the West China Border Research Society (hereafter denoted as WCBRS) and the West China Union University (hereafter denoted as WCUU). The material is separated into two large sections both with different practical purposes: photographic material and documents/literature.

**Photographic material:** Many of the photos discovered in these trunks were taken between 1890's-1950's. The photos are now being categorized and archived in the Museum database. The features of the photos range from old Chengdu to ethnic photographic documentation to display photographs of archeological artifacts. There are also many photos regarding some the very first foreigners to settle in this part of China. This material is currently ready to be used as a source in various kinds of research. The most obvious use of this source would be as a historical comparison of the various ethnic groups in Sichuan Province. There is also a large need to know more about the foreign influence on the creation of the WCUU and WCBRS; this can be done using both photographic evidence and the documentation described below.

**Documents/Literature:** Possibly 90% of the documentation discovered is completely in English and of that quite possibly 50% is handwritten, some of which is illegible. The archival process for this part of the project has been quite slow. But already there is a wealth of treasure. Currently, the only documentation that has been archived is financial information regarding the WCBRS, a few exchanges of letters between WCBRS members and others around the world, and a large set of postcards. Ultimately, the larger part of this project would be help in finishing the archiving of the rest of the documentation. But, there certainly are multiple opportunities for research involving historical economics, Chinese Nationalist History, World War II history, and possibly archeological and ethnographical research. Also as the archiving process moves on, we will begin to gain a much more detailed picture about the WCBRS and WCUU...naturally, this is the kind of information the Museum itself is most interested in discovering.

There are a few artifacts that have been discovered inside the trunks but they are few and far between, mainly things from post-Qing Dynasty. So far other than just the fantastic and massive photographic evidence and documentation, we don't have much more to work with. But this in itself is enough to keep many people very busy for the next few years.