Several Key Slides are Removed to Protect Human Subjects
Conceptual framework
（概念模型）

**Payment for ecosystem services**
（生态系统服务功能支付项目）

**Demography**
（人口统计）

**Household Demography**
（住户人口统计）

**Outmigration**
（外出打工）

**Environment**
（环境：森林；栖息地）

**Livelihood**
（居民生活）

**Land—Agriculture—Productivity**
（农业）

**Local resource Extraction**
（采集）

**Off-farm work**
（非农务工）

**Time**
（时间）
“Participatory mapping is particularly important when dealing with indigenous peoples and forest dwellers that find their lives disproportionately threatened by climate change, environmental degradation and conflict related to access to land and natural resources”
Participatory Mapping

- ... a map-making process that attempts to make visible the association between land and local communities by using the commonly understood and recognized language of cartography
- ... a socially and culturally distinct understanding of landscape that includes information that is excluded from mainstream maps
- ... a map that represents the community
Fanjingshan National Nature Reserve
Guizhou Province, China

Author: Sarah Wandersee, 12/17/2010
Sources: ESRI, NASA
Funding: San Diego State University
Margot Marsh Biodiversity Fund
Zoological Society of San Diego
Maps are often defined by formal cartographic conventions.
Participatory maps are not defined by formal cartographic conventions
Genesis Janeth López Ostiguan. Niño de 1.º primaria
Participatory maps embrace diversity in content and presentation ...

- NVivo

**Focus Group #1**

**Adriana:** Hi, my name is Adriana. What is your name?

**Carlos, Yerena, Wainer, Juan:**

**Adriana:** We are going to have some questions and answers here, are you guys ready?

**Kid:** Yes!

**Adriana:** How old are you?

**Carlos:** 13 years old

**Yerena:** 14 years old

**Wainer:** 15 years old

**Juan and I am 12 years old**

**Adriana:** In what grade are you?

**Carlos:** I am going to start 9th grade at the High school No. 63.

**Yerena:** I started 7th grade at the High school No. 63.

**Wainer:** 8th Grade at the High school No. 63.

**Juan:** 6th grade at the elementary school Concepcion Marquez

**Adriana:** In what supermarket do you work?

**Carlos:** In Commercial Mexicana at Plaza 28

**Adriana:** Is the supermarket near your home?

**Carlos:** Um... No!

**Adriana:** Is it near your school?

**Carlos:** Um... well... no! Not really!

**Adriana:** When you start your day do you first go to school or work?

**Carlos:** I go to school from 8:00 AM to 12:00 and then I go to school which starts at 1:15 and I get out of school at 7:26 PM.

**Adriana:** How do you go to work and school?

**Carlos:** Yes, I take the subway (bus) home, I then take a taxi, and then I walk to school, then I walk to school and then I walk home. I walk a lot, but I like it.

**Adriana:** How long does it take to go from your work to school?

**Carlos:** I live 20 minutes away from my school, then from school to my house about 35-40 minutes.

**Adriana:** Yerena, do you go to work in the morning or in the afternoon?

**Yerena:** In the afternoon.
Early GIS Participatory Mapping (SDSU, 1990s)
Participatory maps are not defined by formal cartographic conventions

- Andy Kesby’s (2005, Signs) dance culture
Maps that resonate with particular personal and collective identities
Mapping Strategies Focus on:
1. Attachment to Place
2. Attachment to Networks
Preliminary Multimedia Participatory Mapping (FNNR)

1. 3-D digital map for participatory mapping of resource use

2. Gridded map used for participatory mapping of fields and herb/fuelwood collection

3. Hiking with locals to document land changes from historical norm

4. Pictures and videos of traditional singers and dancers improvising new words for ethnic songs
Section 1: Participatory Mapping and children/human geography

1.1 Where is your house? What is the nearest school? What is the nearest health clinic? What is the nearest road? Please indicate on the 3-D Map. (画在地图上)
   a. House __________________________
   b. School __________________________
   c. Clinic __________________________
   d. Road __________________________

1.2 When are your land parcels? Please indicate on the 3-D Map. (画在地图上)
   a. Parcel 1 __________________________
   b. Parcel 2 __________________________
   c. Parcel 3 __________________________
   d. Parcel 4 __________________________
   e. Parcel 5 __________________________

1.3 Which way do you prefer to go to your land parcels? Please indicate on the 3-D Map. (画在地图上)
   a. path (house to Parcel 1) _______ Why? ______________________
   b. path (house to Parcel 2) _______ Why? ______________________
   c. path (house to Parcel 3) _______ Why? ______________________
   d. path (house to Parcel 4) _______ Why? ______________________
   e. path (house to Parcel 5) _______ Why? ______________________

1.4 On a typical day; what kinds of activities do you do when you leave the village? (Collecting firewood, work, Burns or business deeds, Make tea, Feed, Fishing, and other daily activities, draw on map) (画在地图上)
   a. Activity 1 __________________________
   b. Activity 2 __________________________
   c. Activity 3 __________________________
   d. Activity 4 __________________________
   e. Activity 5 __________________________
   f. Activity 6 __________________________

1.5 Where do you go (L4)? Please show us all the places on the 3-D Map (give orientation to map) (画在地图上)
   a. Point 1 __________________________
   b. Point 2 __________________________
   c. Point 3 __________________________
   d. Point 4 __________________________
   e. Point 5 __________________________
   f. Point 6 __________________________
   g. Point 7 __________________________
   h. Point 8 __________________________

1.6 Which way do you prefer to go to the places? Please indicate on the 3-D Map. (画在地图上)
   a. path (house to point 1) _______ Why? ______________________
   b. path (house to point 2) _______ Why? ______________________
   c. path (house to point 3) _______ Why? ______________________
   d. path (house to point 4) _______ Why? ______________________
   e. path (house to point 5) _______ Why? ______________________

1.7 Which activities do you consider essential for your way of life? Indicate on L4 Why? (画在地图上)
   a. Activity 1 __________________________
   b. Activity 2 __________________________
   c. Activity 3 __________________________
   d. Activity 4 __________________________
   e. Activity 5 __________________________
   f. Activity 6 __________________________
Our Future Work?
谢谢