

- **Visible and Invisible Self-Managed Irrigation Organizations**

edo de México

Cuautitlán 7,500 hectáreas,

Teoloyucan 1,420 hectáreas

Coyotepec 346 hectáreas.



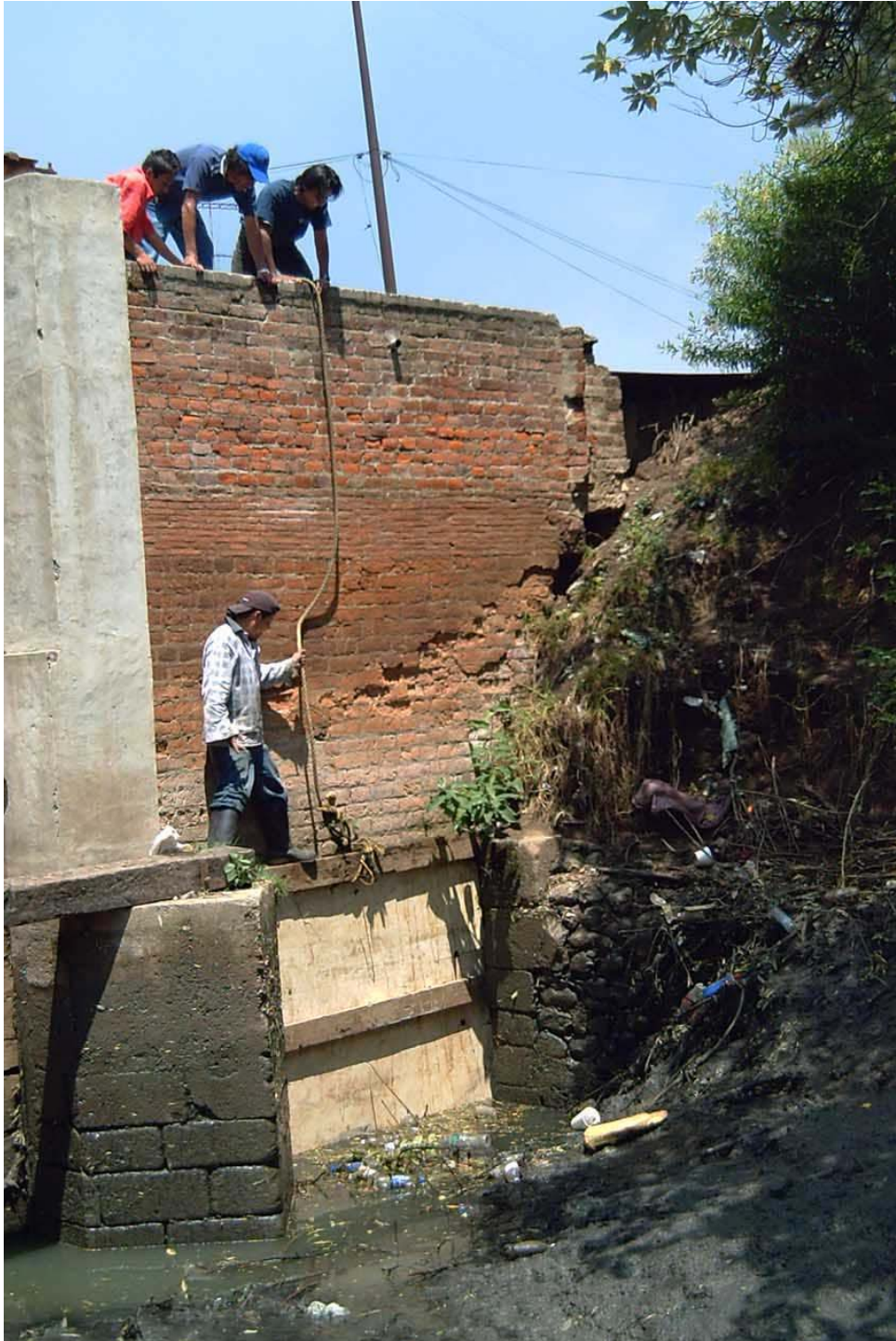




































































Coahuila

Nazas

small systems

100 to 1,911 hectares











































































edo de México

Tejalpa

1,498 hectáreas

88 tanks



























Michoacán

Coeneo-Huaniqueo

2,000 hectareas

(artificial flooding)















Guerrero

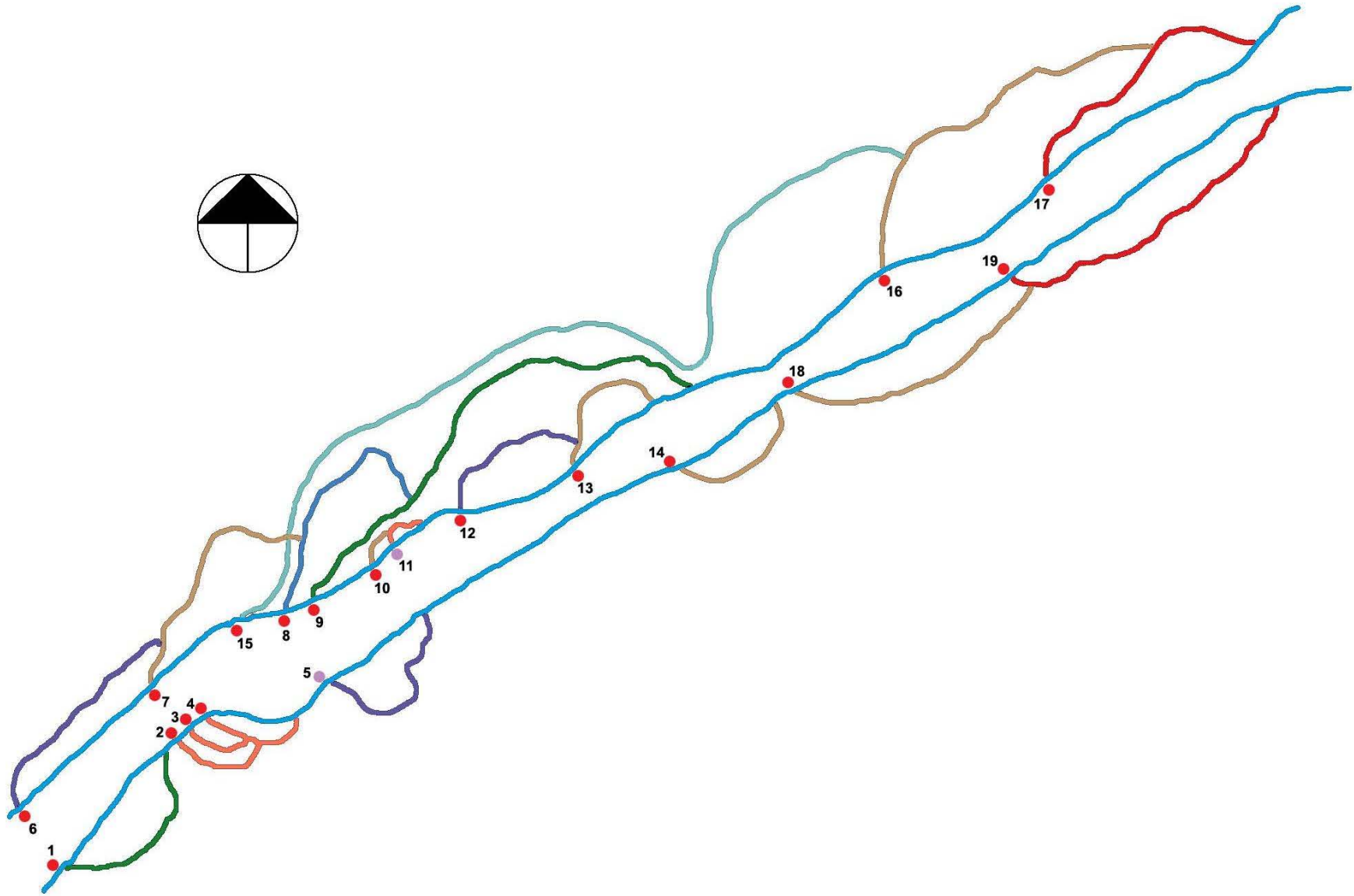
La Cañada

19 small dams, interconnected systems

3,000 hectáreas

all riparian trees are planted













































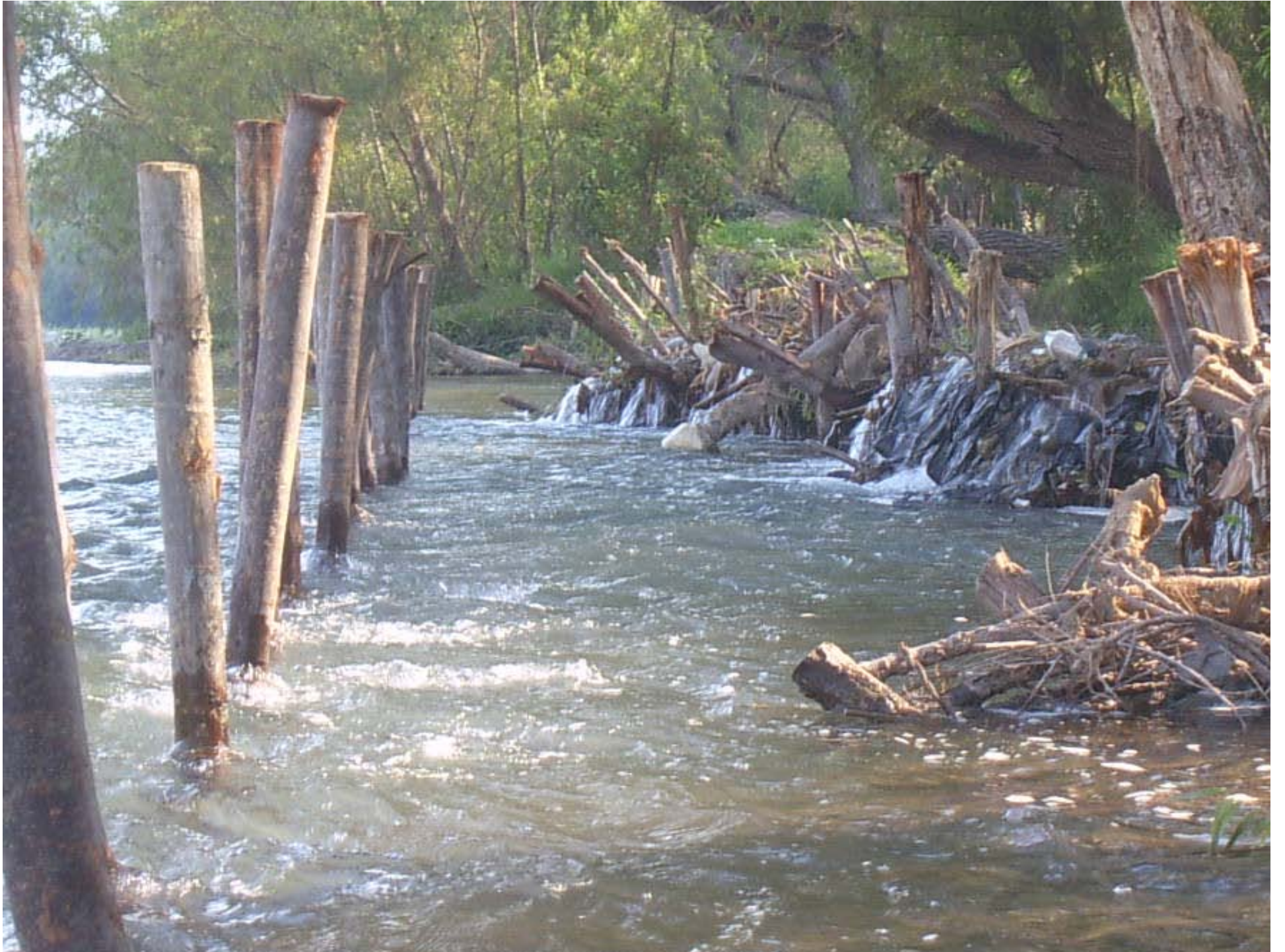












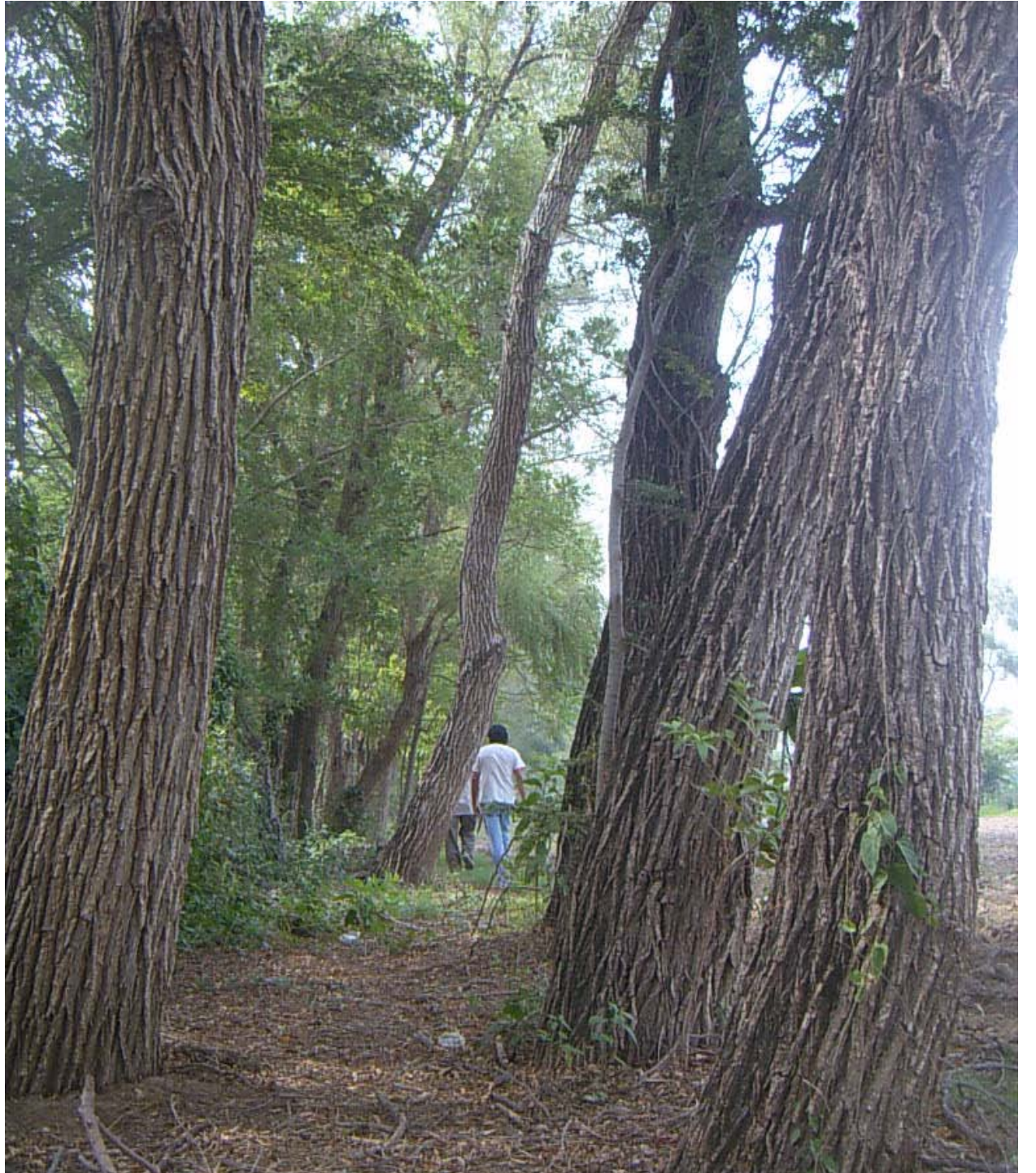














edo de México

Tepetitlan

9,721 hectáreas



































Morelos

Metepiec and Tenango

very small systems (water conduction by  
hose)

743 hectáreas

















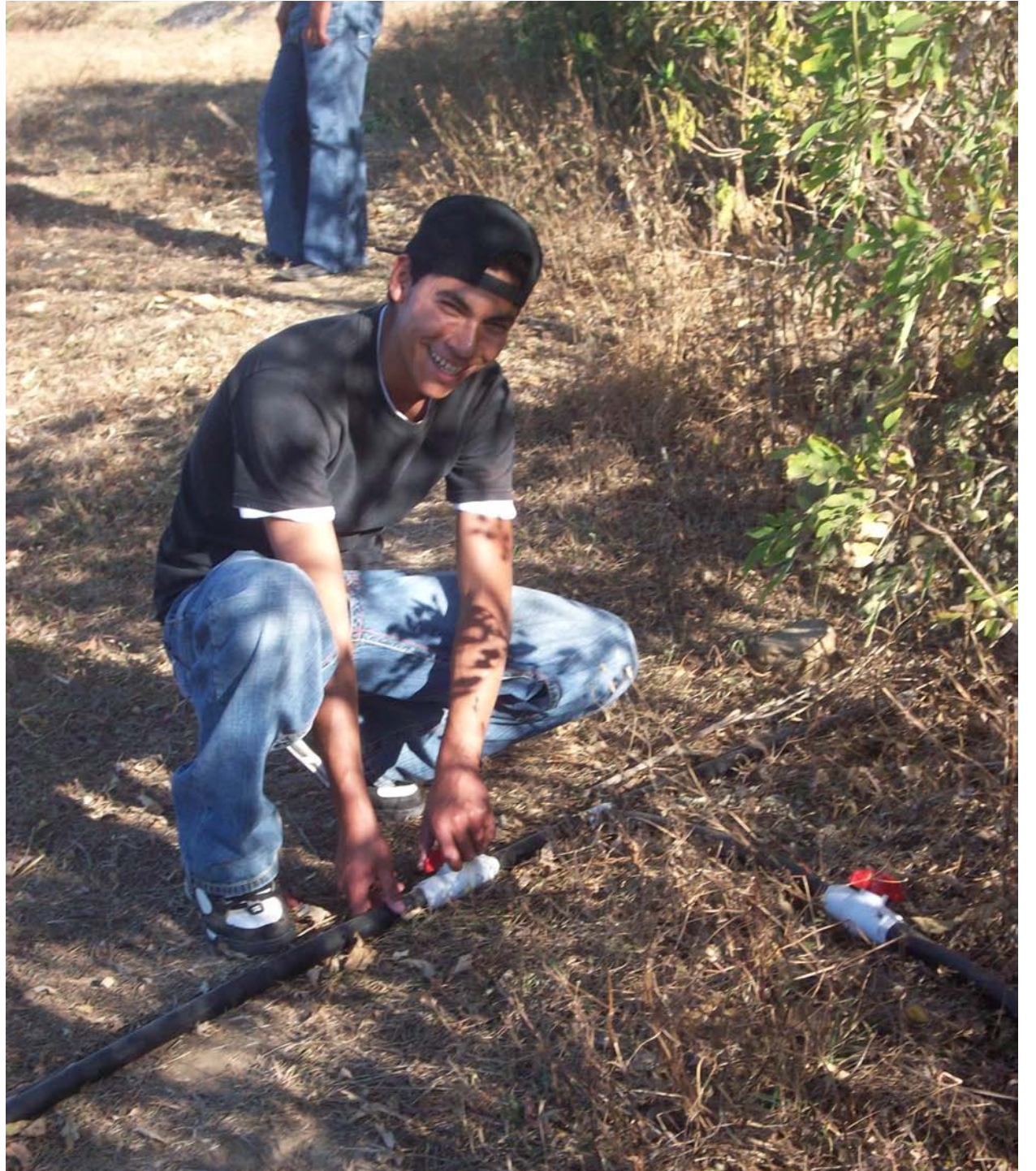


































The cases are by groups by date of origin of the organization:

- colonial
- early XXth c
- with no legal framework
- and ongoing



**1) The persistence of very old organizations, dating from colonial times.**

Cases of this type are not frequent, due to

changes in land tenure:

the concentration of property in the late XIXth c that displaced peasant community tenure, the agrarian reform in the 1930s that dispersed property.



**The persistence of very old organizations, dating from colonial times**

In three cases, however, we found little disruption due to changes in land tenure as well as persistence of very old organizations.



**The persistence of very old organizations, dating from colonial times**

Resistance to government imposed changes

- a) integration into a government managed Irrigation District, displacing self-management
  
- b) new boundaries: integration of several systems into one river wide organisation



**The persistence of very old organizations, dating from colonial times**

## **Juarez**

1,800 hectares

Integration into an Irrigation District

the irrigators refused access to the government staff and kept control of operation

This situation lasted from the 1950s to the late 1990s with turn-over of the Irrigation District.  
Some 50 years.



**The persistence of very old organizations, dating from colonial times**

## **Valle de Santiago**

10,000 hectáreas

Integration into an Irrigation District

government staff took over the management.



**The persistence of very old organizations, dating from colonial times**

However, the irrigators

- a) maintained solidarity and have a history of successful negotiation with the Irrigation District authorities and
- b) after turn-over in the 1990s they became a model case for successful turn-over.

The suppression of self-governance lasted from the 1930s to the 1990s, that is some 65 years.



**The persistence of very old organizations, dating from colonial times**

## **Cuautitlán**

7,500 hectáreas

+ 2 other small systems: 9,200 hectáreas

government proposed river wide organization

all the Irrigation systems on the river refused the centralization in one self-managed organization  
one by one they managed to split away (officially) from the river wide organization



**The persistence of very old organizations, dating from colonial times**

In the 1970s three of the systems that take water from the same dam established a non-official committee.

The non-official committee has lasted from the 1970s to nowadays, some 40 years.



## **2) The persistence of early XXth c organizations, created after the agrarian reform**

Resistance to government imposed changes:

- a) integration into a government managed Irrigation District, displacing self-management
- b) changes in legal framework, the larger organisational level has no legal backing



**The persistence of early XXth c organizations, created after the agrarian reform**

## **Ixmiquilpan**

3,700 hectáreas

Integration into an Irrigation District

the irrigators refused access to the government staff and kept control of operation

This situation lasted from the 1970's till turn-over, some 30 years.



**The persistence of early XXth c organizations, created after the agrarian reform**

## **Nazas**

several small systems, the largest 1,700 hectáreas  
total 10,000 hectareas

Integration into an Irrigation District

local organizations were officially suppressed

in these small systems continuity of local  
management, based on horizontal agreements



**The persistence of early XXth c organizations, created after the agrarian reform**

Even after turn-over, the local, traditional, management is still in place, as the government schema for the new self-managed organization is too large and too centralized.

The local, traditional, un-official management has lasted from the 1960s to nowadays, some 50 years.



**The persistence of early XXth c organizations, created after the agrarian reform**

## **Tejalpa**

1,500 hectáreas and 88 tanks

official framework for the organization disappeared in 1992.

Notwithstanding, management, after some turbulence, is still in place.

Some 20 years with a non official organization



**The persistence of early XXth c organizations, created after the agrarian reform**

## **Nexapa**

12 irrigation systems with a common dam and tunnel to convey water from one river to another  
8,000 hectares

In the 1960's the 12 systems created a non-official committee to take care of the dam and tunnel, as well as to share water



**The persistence of early XXth c organizations, created after the agrarian reform**

Each irrigation system had an officially recognized organization. However the official framework disappeared in 1992. Management is still in place.

**The persistence of early XXth c organizations, created after the agrarian reform**

The headwork of the 12 systems (the dam and tunnel) needed considerable overhaul and the National Water Commission only had budget for Irrigation Districts, the multi-system organization has integrated as an Irrigation District on condition of retaining the traditional organization



**The persistence of early XXth c organizations, created after the agrarian reform**

The larger un-official committee has lasted from the 1960's to the present, some 50 years.

The irrigation systems committee have lasted from the 1990's to the present, some 20 years.

3) The **creation of organizations**, mostly horizontal agreements between communities, after the agrarian reform **w/ no official legal framework**



The **creation of organizations**, mostly horizontal agreements between communities, after the agrarian reform **w/ no official legal framework**

## **Coeneo-Huaniqueo**

2,000 hectáreas

horizontal agreements between communities  
since the agrarian reform to the present

The **creation of organizations**, mostly horizontal agreements between communities, after the agrarian reform **w/ no official legal framework**

## **La Cañada**

19 interconnected systems

3,000 hectareas

horizontal agreements between communities  
since the agrarian reform to the present



The **creation of organizations**, mostly horizontal agreements between communities, after the agrarian reform **w/ no official legal framework**

For some of the systems, in the 1990's the government created and registered official organizations, however with different boundaries than those in the traditional organisation

The official organisation has not been adopted.

**4) Ongoing: Replacement of government management for local community-based management.**



**Ongoing. Replacement of government management for local  
community-based management**

## **Tepetitlán**

9,700 hectáreas

a government managed Irrigation District  
dominated by traditional Indian communities,  
although there was little participation in  
community level water distribution

## **Replacement of government management for local community-based management**

with turnover in the 1990's there is turbulence:  
the communities refused an expensive  
bureaucratic type self-governance

The new organization is mostly centered in the  
communities  
and successful, as timing of water delivery has  
improved



## **Replacement of government management for local community-based management**

the system has an official legal framework;  
however management does not follow the official  
pattern –some 20 years

	irrigated surface	informality: years
<b>Juarez</b>	1,600	50
<b>Valle de Santiago</b>	10,000	65
<b>Cuautitlán</b>	9,000	40
<b>Ixmiquilpan</b>	3,700	30
<b>Nazas</b>	100 to 1,700	50
<b>Tejalpa</b>	1,500	20
<b>Nexapa</b>	8,000	50
<b>Coeneo-Huaniqueo</b>	2,000	90
<b>La Cañada</b>	3,000	90
<b>Tepetitlán</b>	9,700	20



The case studies show that informal organization is quite extensive and successful.

And not only have they succeeded in holding on to their organizations they have created new organizations with no official framework by means of horizontal agreements or by adding a second or third tier of organization.

Visibility of the organizations rather than existence may be an issue.

I think we need to take a closer look at how irrigation system self-management is resilient in spite of lack of legal frameworks or government recognition.

More attention should be given to factors such as: How aggressive is the government policy? What does it attack? Water rights? Does it try to suppress local management and expand government management?

What conditions are relevant so that irrigators can take over the management of an irrigation system?



My impression is that, at least in Mexico, government policies and legal frameworks that fragilize the community level organization are more dangerous to self management than those dealing with the larger organization, because for small holders the community is a building block to other larger multi-community organizations