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Mexico, 2017

## Farm animal protection: *Tapescos*

### Keywords

Animal protection, bird shelter, flood protection, local practices, *tapescos*.

### Summary

The population of the municipality of Jonuta (Tabasco, Mexico), which depends heavily on farming for its subsistence, loses many farm animals during floods. To protect their livelihoods, the people have re-adopted and improved the local practice of building bird shelters.

### The problem

Livestock and crops are highly vulnerable to floods. Entire crops and many farm animals can be lost. Efforts are therefore being made to find ways to support agricultural activity by reducing risks and increasing sustainability.

The communities of Jonuta receive limited support from official institutions, and lack economic resources, information and assistance.

Realizing that the population of Jonuta could not protect their farm animals when floods occurred, the Flood Resilience Programme (FRP) in Mexico identified the following common problems:<sup>1</sup>

- More than 80 per cent of people in Jonuta depended on livestock and farm animals for their livelihood.
- Producers had no plan for dealing with emergencies. Each farmer individually relocated his or her animals when a flood occurred.
- The most vulnerable were backyard poultry producers. Up to 70 per cent of birds were lost to diseases following floods. After fish, poultry is the second largest source of protein for families.

### How

The Programme examined farm animal protection options. One was to revive and improve the local practice of constructing poultry shelters called *tapescos*.

*Tapescos* are wooden boards on stepped trestles, standing on high ground above flood levels. Their pyramid shape, with steps of 20 centimeters, allows birds to climb above the water as it rises.

<sup>1</sup> Dr. Sergio Vásques and Eugenia Morales MSc, Modelo de Reducción del Riesgo y Sostenibilidad Medios de Vida en Jonuta (2015, World Animal Protection).

## Materials

6 wooden boards (7.5 cm x 4 cm x 2.5 m)
20 wooden boards (3 cm x 2.5 m)
12 wooden bars (3.3 cm x 2.5 m)
1 kg nails (5 cm)
Polypropylene string diamond (23 m)
1 tarpaulin (2 m x 3 m)
7 wooden poles (5 cm x 3 m)
Matt varnish
Tools (hammer, saw)

*Tapescos* should be constructed from strong materials. Their pyramid shape creates room for birds of different sizes. Very small birds that cannot jump should be enclosed in boxes. Roofs, feeders and drinkers can be added.

The construction of a *tapesco* does not require more than three people, and they can be made by families at home. They need to be maintained every two years.

*Tapescos* were reintroduced very successfully in Tabasco. The technique was already familiar to local people, who improved on it and used better materials. In communities that had never used *tapescos*, it took time to train people in their use and to demonstrate their value.

## How the project has promoted resilience: case-study

Building *tapescos* protected family livelihoods and, because they are easy to construct, most families now have one. Families can also modify and improve them without external assistance. For example:

- **Size.** Families adapt the size of their *tapescos* to the animals they own (chickens, ducks, turkeys, etc.). One family designed a *tapesco* for chickens, which protected them from both floods and predators.
- **Shape.** Some families added a platform to give additional protection from floods.
- **Materials.** The original *tapescos* had a roof to protect birds from the weather. Some families covered the whole structure with straw, plastic, wire cloth, or other materials.

*Tapesco* shelters have increased resilience across the following of the five capitals in the programme's resilience approach:

- **Human.** *Tapesco* construction increases knowledge and awareness and improves protection practices at family level. It also improves family health by separating poultry from people.
- **Social.** The construction of *tapescos* promotes participation and cooperation. Some people show great inventiveness. *Tapescos* increase the community's ability to maintain food supplies after a flood.
- **Physical.** *Tapescos* protect food supplies during emergencies.
- **Financial.** *Tapescos* protect subsistence resources and reduce economic losses during disasters.

## Cost

The costs include:

- Tools for construction.
- Materials.
- Payment of community facilitators or trainers.
- Transport of materials and people.

Cost and benefits:

- Number of communities: 11
- Number of *tapescos*: 555
- Number of beneficiaries: 2,220
- Amount invested per *tapesco* USD 30.75
- Total investment USD 17,068

The value to families of *tapescos* can be calculated as follows:

- Each *tapesco* can accommodate up to 30 birds (chickens, ducks and turkeys).
- Each bird has a different value. Broadly, hens are sold for USD 8.50, ducks for USD 5.50 and turkeys for USD 40.00. The average price per bird is USD 18.
- Not all families will keep 30 birds in each *tapesco*, but (were they to maximize its use over a year), each *tapesco* could protect (an averaged) income of USD 540.00 per year.



Figure 1. Men in Jonuta constructing a *tapesco* for the protection of the poultry during floods.

## How we work

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Over the next ten years, the collective focus of the IFRC will be on achieving the following strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disasters and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace.

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