REVITALIZATION
OF THE CULTIVATION OF WHEAT
AND OF THE WATER MILLS

BOYACÁ, COLOMBIA

A commitment with peasant family agriculture and rural heritage
The Colombian production of wheat has suffered a severe fall from 1960 onwards. This was caused by the introduction of donated and subsidised wheat in the country, which made local producers unable to compete. Production fell from 145,000 metric tons in 1960 to 8,933 tons in 2015. While wheat production fell, its consumption rose from 10 kilograms per capita in 1950 to 32 kilograms in 2011. Imports reached 1,715,000 tons in 2014. The decrease of the national production of wheat caused a change in the agricultural traditions of the regions where its cultivation was important. Such is the case of the department of Boyacá. Nevertheless, in Socha and Socotá, municipalities located in the upper basin of the río Chicamocha and the highlands of the páramo de Pisba, remains of the traditional wheat cultivation and flour production through water mills can still be found. These varieties of flour are mainly used by local families. The evolution of agriculture in the Boyacá department causes concern that the aspects of the Colombian rural history related to peasant production of wheat and water mills might be bound to disappear.

Considering that in Socotá and Socha six water mills still are in working condition and that the local communities have expressed their interest in maintaining their traditional cultivation of wheat, the project aims at contributing to the revitalization of these activities and ancestral knowledge which represent a valuable heritage and a significant example of sustainable agriculture.

**OBJECTIVES**

- Strengthening of peasant family agriculture
- Revitalization of wheat production
- Improvement of wheat varieties
- Rescue of the remaining water mills
- Creation of a network of commercialization of the varieties of four under a community trademark
- Improvement of the present cropping systems with reference to ancient systems now in disuse
- Local development
- Participative research
- Community rural tourism

**WHEAT AND WATER MILLS IN COLOMBIA AND BOYACÁ**

With this Project, Agrosolidaria aims to stimulate the peasant family production of wheat and milling in water mills in the municipalities of Socotá and Socha in the Boyacá department of Colombia. This will be accomplished through participative research and the revitalization of the production and commercialization of varieties of flour that will permit local development and the conservation of the rural heritage.
Investigate the introduction in the region of wheat and the techniques of water milling.

Examine the local techniques of cereal cultivation and analyse, through participative research, the means of improving the present techniques.

Examine which wheat varieties adapt best to local conditions and demand in the market.

Characterise the natural conditions that support the local production systems of wheat, peasant family agriculture and water milling; elaborate with the local communities proposals that will contribute to their conservation.

Analyse in historical perspective the causes of the decline in wheat production and the disappearance of most small and medium milling enterprises in Colombia; understand the conditions that permitted their survival in a few regions of the country.

Promote the agricultural and milling heritage through educational projects, rural tourism and creating a community museum about cereals, wheat and milling in Boyacá.

Study the functioning of the present water mills and the techniques that were used to build them; examine which improvements could be made for the mills to be more efficient and easier to operate.

Analyse the present social and economic conditions of wheat growers and small-scale millers of Socha and Socotá; develop proposals to improve their living conditions and encourage the next generation to continue with these activities.

Promote the commercialization of the different types of flour produced by good agricultural practices and ground in water mills; create a community trademark and generate a strategy for the positioning of the product in the market.
Presently, peasant agriculture is being affected by the depreciation of its knowledge, which has been replaced by techniques that are harmful to the environment and the health of both farmers and consumers. It also suffers from low income, which leads many peasants, especially young people, to leave the land and consider that there are better opportunities to be found in town. The type of education that is provided in the countryside has contributed to guide the youth towards activities different from agriculture. Waves of rural violence (paramilitary groups and guerrillas) have strongly contributed to strengthen the tendency to abandon rural areas.

The discarding of many traditional crops and the introduction of “green revolution” techniques has led to the partial loss of ancestral know-how. This project aims at a recovery of lost knowledge and the collaborative development of new cropping systems and technical improvements using both ancestral knowledge and contributions of contemporary science. Good agricultural practices will permit the production of healthy foodstuffs and varieties of flour that can be sold as special products due to the conditions in which they were produced.

Agrosolidaria is an element of the social fabric of the region where this project will be implemented. We will work jointly with the families who belong to Agrosolidaria as well as any peasant family which is desirous to share its knowledge and to participate in experiments to evaluate wheat varieties, new cropping systems and is willing to use good agricultural practices.
REVITALIZATION
OF WHEAT PRODUCTION

Due to the steep decline of the national production, wheat stopped being a commercial crop and became a subsistence product due to the fact the local population is quite attached to the consumption of traditional foodstuffs that involve the use of this cereal. The creation of new commercial outlets with the help of fair trade networks for water mill ground flour and the setting of a price premium for cultivators and millers should permit wheat to reclaim its place in local cropping systems.

IMPROVEMENT
OF WHEAT VARIETIES

We will try to identify possible heritage varieties of wheat and make a record of the varieties presently in use. New varieties will be evaluated both for their adaptation to local conditions and to demand on the market. Robustness and resistance to disease will be preferred to productivity.

COMMUNITY
RURAL TOURISM

The development of ecotourism and of rural tourism is part of the project’s strategy. It will emphasise the discovery of the social, historical, natural, economic and technological aspects of the region. Both forms of tourism foster respect for the communities and nature and the exchange of knowledge and vital experiences. The region offers many tourist attractions due to the presence of the National Natural Park of the Pisba páramo and its situation on the Ruta Libertadora (the Liberation Route lead by Simon Bolivar). The project will offer the opportunity to discover how a water mill operates and to share with a peasant family. Our proposal also ought to be attractive for schools and universities, especially if a museum of cereals and milling is created.

CREATION OF
COMMERCIALIZATION NETWORKS UNDER THE NAME OF “FLOUR FROM OUR SOIL” (HARINA DE LA TIERRA IN SPANISH)

Flour produced in conditions of good agricultural practices and ground in water mills will be sold through a network that will exalt their qualities. Not only will Agrosolidaria sell this flour in its fair-trade networks; it will also be offered to shops specialising in natural products. We will have to find an attractive trademark, a special design for the flour bags and a promotional strategy.

LOCAL
DEVELOPMENT

The project will favour local development. The increase in wheat production, the increase in milling activity and the expansion of rural tourism will create employment opportunities. The participation of the local population in the reflections that will take place during the participative research will be an important factor of human development in the region.

RESCUE OF
THE REMAINING WATER MILLS

Some ten water mills, perhaps less, remain in working condition of the several hundreds, which once existed in Colombia. All of them are to be found in the Boyacá and Cauca departments. This grinding technique was introduced by the Spaniards in their American colonies. They represent a very valuable technological heritage and, if only for this reason, ought to be saved from the risk of disappearance. Yet these mills are first and foremost an important means of livelihood for the millers who keep them in working order. Our project aims at saving these surviving water mills by expanding the market for the flour they produce and by obtaining a price premium within the framework of solidarity and fair trade, which is one of the goals that Agrosolidaria seeks.

This project aims at contributing to revaluing the peasant families’ activity and knowledge, and also at improving their earnings so that they may be encouraged to remain in the countryside and continue their present activity.