

# Good quality seed: the basis for good production and better yield in the cultivation of native potatoes and Andean tubers

Systems for the provision of seeds of native potatoes and Andean tubers, economic and sustainable for family agriculture, allow to improve the crop yield .



Production of good quality seeds of native potatoes and andean tubers and adoption of IPDM strategies for improving crop yields

## The implemented initiative

Through strategies of Participatory Rural Innovation, this platform seeks to improve the system of potato and Andean tubers production of small producers in Bolivia and Colombia, with the use of seeds of good genetic and phytosanitary quality. The seed is expected to be

available continuously for small farmers, without relying on third parties to supply it. The adoption of IPDM strategies in crops aims to achieve a decrease in the use of agrochemicals, which will positively impact the environmental sustainability of production systems.

The use of good quality seed, the adoption of IPDM strategies and the socio-organizational strengthening, improve the yield of potato crops and Andean tubers in family farming

## The technological solution

With the strengthening of the community fabric of the families participating in the project, it is hoped to improve the system of potato and Andean tubers production of small producers, encouraging the use of seeds of good genetic and phytosanitary quality. In Colombia, the production of native potato seed will be implemented in a "pilot laboratory" managed by farmers trained in the use of biotechnological tools for in vitro tissue culture. In Bolivia, the cleaning of the seed

through in vitro tissue culture will be carried out by the UMSS, which, in association with the municipality of Sacaba, will be responsible for the continuous supply of seed to farmers in the area. Likewise, it is expected that with the adoption by farmers of agro-ecological designs and the incorporation of different strategies in IPDM programs in their crops, the use of agrochemicals decrease, which will positively impact the environmental and economic sustainability of crops.



### Root to Food: a proposal to improve the production systems of native potato and Andean tubers producers



## Results

Participatory collection and recovery of 36 varieties of native potatoes and 19 mashua morphotypes in Colombia and 56 varieties of native potatoes, 3 of ulluco, 2 of oca and 2 of mashua in Bolivia.

50 varieties of native potatoes established in vitro and 4 of them in the process of cleaning viruses through thermotherapy.

One virtual workshop on soil analysis and fertilization of potato crops and one virtual workshop on Management of late blight.

Participatory construction of a social and technical-commercial base line with the three organizations in Colombia.

Establishment of two conservation and participatory research centers in Colombia, in which the agromorphological characterization of the collected materials is being carried out.

Construction of Innovation Routes and a socio-business strengthening plan with the organizations participating in the project.

Active participation of women in the development of tasks, commitments and activities under the project.

**30**  
Native potatoes varieties characterized

**500**  
Trained people

**20%**  
Fewer applications of agrochemicals

**10%**  
Better yield of native potatoes crops

MÁS INFO

