



Raised bed lotus cultivation, Viet Nam

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Sustainable Development Goals	No poverty, zero hunger, and life on land

Summary

Cultivating lotus in raised beds is a local adaptation practice in flood prone areas of the Quang Tri province of north central Viet Nam. Communities traditionally collected lotus seeds from plants grown in common water bodies and sold them in markets. However, there was no initiative to further develop, promote and disseminate this practice. The practice of raised beds has been recognized as suitable for broader replication in flood prone areas only recently, and communities have started to engage in cultivating lotus in low lying flood prone areas.

Description

Lotus cultivation on raised beds can be implemented during the rainy season from September to December in the low-lying areas of the country, on land that farmers would otherwise leave fallow due to excessive water stagnation. The objective of this practice is, to ensure production at a time when cultivation would ordinarily be impossible, providing employment opportunities and household income during floods.

1. Implementation of the technology

The cultivation of lotus in raised beds requires drainage of excess water through small channels in order to create favourable soil conditions for the cultivation and to counteract the impact of heavy rainfall and

strong cyclonic storms that regularly affect north central Vietnam. The practice is most successful in freshwater eco-systems with heavy textured soils. The raised beds should be 30 to 50 cm high and 100 cm wide, in order to create favourable soil conditions. Drainage channels should be wide (100 cm). Lotus seeds are sown on the raised beds. The initial cost of land preparation is substantial. However, family laborers can be engaged into preparing the raised beds. Lotus seeds for cultivation are usually available locally. Primary beneficiaries are small farmers and small local businessman. Lotus cultivation provides employment opportunities during flood season and increases household income.

This practice does not imply any maintenance costs, but the raised beds need a slight readjustment every year before the beginning of the rainy season. Institutional support is required to disseminate this practice into other ecologically similar regions. Local market facilities to procure lotus seeds have to be established and should be connected with export institutions. Institutional interventions are necessary in order to curtail exploitation by middle men. Local community-based organizations and financial institutions need to be strengthened to promote replication of the practice.



Crop Production

2. Further reading

- Sayre, Kenneth D. 2006. Raised Bed Cultivation, in Encyclopedia of Soil Science, Taylor & Frances.

3. Agro-ecological zones

- Tropics, warm

4. Related/associated technologies

- Cultivating lotus on raised beds in flood prone areas, Viet Nam: 7578.

5. Objectives fulfilled by the project

5.1 Resource use efficiency

The practice allows for crop production to take place during a time when cultivation would ordinarily be impossible during rain/flood seasons.

5.2 Pro-poor technology

This practice requires very little investment and provides employment opportunities. It generates income during the rainy season.