

Jeevatu Production

## Benefits of Jeevatu in crop production and protection (Nepal)

Jevatu

## **DESCRIPTION**

#### Beneficial uses of Jeevatu in crop production and protection.

Aims / objectives: The use of Jeevatu has been and still is solely for agricultural purpose. The main objective of it is to effectively free the environment different poisonous chemicals that are present in the form of pesticides and fertilizers.

It aims to prevent and control pests and diseases, including bacterial, viral and fungal, in vegetables, cereals, flowers and fruit trees, and to improve the growth of the plant, the yield and the quality of the fruits (vitamin content and peel thickness).

It can also be used to keep different fruits and vegetables fresh for a longer period of time.

Jeevatu further helps by promoting the proper management of the waste materials as the key ingredient in the process of producing Jeevatu is different organic wastes.

It provides an advantage to the farmers by an economic point of view as well - the cost of Jeevatu is comparatively much less than that of other pesticides and fertilizers.

Methods: A 2 feet wide and 1 foot long pit is dug in a fertile land.

A plastic sheet is placed in the pit

Raw cow dung and water is poured in the pit and made greasy

The 1m25cm plastic sheet is then made air and water tight by tying it up with a jute rope

Every 2-3 days water is added and the mixture is stirred well The water added amounts up to about 50L.

After 17-25 days , a green colour is seen in the outer surface of the plastic bag and the odor is no longer present, this indicates that the fertilizer (Jeevatu) is now ready to be used.

The plastic bag is then removed and a new plastic sheet is placed to start the production of a new batch of Jeevatu

1L of the previous made Jeevatu is also included to after the second batch to gain a better yield of Jeevatu.

Role of stakeholders: There are mainly two types

The producers-

They seek profit in terms of money as they plan to produce good amounts of Jeevatu and sell them to the people involved in agriculture or animal husbandry

The people involved in agriculture and animal husbandry-

They seek profit in terms of good yield of crops or animal products. The use of Jeevatu benefits them and keeps them as well as the environment safe.

#### LOCATION



**Location:** Lalitpur, Nepal, Nepal

## Geo-reference of selected sites

• 85.32193, 27.6594

Initiation date: n.a.

Year of termination: n.a.

#### Type of Approach

traditional/ indigenous recent local initiative/ innovative

project/ programme based



Jeevatu Production

## APPROACH AIMS AND ENABLING ENVIRONMENT

#### Main aims / objectives of the approach

The Approach focused mainly on SLM with other activities (animal husbandry, can also be used in kitchen, toilets, remove bad odors)

To learn how Jeevatu was made

To learn how Jeevatu was made available to the people

To learn how much the people knew about it

To learn the benefits it had in the field of agriculture and animal husbandry

The SLM Approach addressed the following problems: Most people involved in agriculture and animal husbandry are not economically and financially strong. Hence the solution of financial and economic related problems should be given top priority.

#### Conditions enabling the implementation of the Technology/ ies applied under the Approach

• Legal framework (land tenure, land and water use rights): The existing land ownership, land use rights / water rights greatly helped the approach implementation: community ownership meant no hindrance to development.

## Conditions hindering the implementation of the Technology/ ies applied under the Approach

- Availability/ access to financial resources and services: Jeevatu is a local production, even though there is a specific group of people who produce it and distribute in the market as the methods to produce Jeevatu can be considered simple. Due to this reason other companies and people don't show much interest in investing in it, hence there is low financial support. Treatment through the SLM Approach: If Jeevatu can be produced in a large scale, it will gradually be recogzied worldwide, hence more financial assistances would be there and the constraint would be eliminated.
- **Knowledge about SLM, access to technical support**: There is lack of technology use Treatment through the SLM Approach: If by some way technology can be introduced in the making of Jeevatu, the production would be quicker, better and more reliable.

#### PARTICIPATION AND ROLES OF STAKEHOLDERS INVOLVED

Stakeholders involved in the Approach and their roles

What stakeholders / implementing bodies were involved in the Approach?	Specify stakeholders	Describe roles of stakeholders
local land users/ local communities	Farmers like Kalpana KC of Emadole, Lubu	Mainly used by farmers to enhance the crop productivity and its protection. Comparatively more economically disadvantaged groups were involved than socially disadvantaged ones. This is due to the cheap price of Jeevatu, i.e. only Rs.100 per bottle. Jeevatu being cheaper than other chemicals enabled the people of different economic groups to have better agricultural products.
community-based organizations	People involved in agricultural works and animal husbandry	
SLM specialists/ agricultural advisers		
NGO	Nepalese Farming Institutes	

private sector	Nepalese Natural Bioproducts & different nurseries	
national government (planners, decision-makers)	NARC	

#### Lead agency

Dr Bharat Kumar poudyal, Senior vegetable Development officer

#### Involvement of local land users/ local communities in the different phases of the Approach



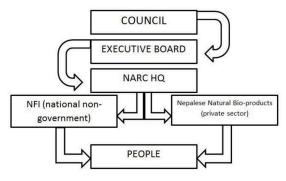
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About 15 Nepalese scientists of NFI developed this package of beneficial microbes after 25-30 yrs of research with the consultation & experimentation with several farmers and landusers.

#### Flow chart

The flowchart shows how Jeevatu is made avaiable to the people. Jeevatu was first made in NARQ HQ, the production was further continued by non governmental organizations such as NFI. Different private sectors are also involved in funding of Jeevatu production.

The local people or farmers can get access to Jeevatu through these non governmental organizations and private sectors



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#### Decision-making on the selection of SLM Technology

### Decisions were taken by

- land users alone (self-initiative)
  - mainly land users, supported by SLM specialists
- all relevant actors, as part of a participatory approach
- mainly SLM specialists, following consultation with land users
  SLM specialists alone
- politicians/ leaders

### Decisions were made based on

- evaluation of well-documented SLM knowledge (evidence-based decision-making)
- research findings
- personal experience and opinions (undocumented)

## TECHNICAL SUPPORT, CAPACITY BUILDING, AND KNOWLEDGE MANAGEMENT

#### The following activities or services have been part of the approach

- Capacity building/ training
- Advisory service
- Institution strengthening (organizational development)
- Monitoring and evaluation
- Research

#### Capacity building/ training

# Training was provided to the following stakeholders

✓ land users

field staff/ advisers

## Form of training

on-the-job

farmer-to-farmer demonstration areas

public meetings courses

## Subjects covered

The people who received trainings and had gained awareness involved those related to agriculture or animal husbandry.

They were told about the benefits of Jeevatu over the other chemicals and other important facts about how the chemicals cause harm to our bodies and the environment were also mentioned.

## Advisory service

#### Advisory service was provided

on land users' fields at permanent centres

Advisory service is inadequate to ensure the continuation of land conservation activities; Government and other advisory services are not yet adequate as the message flow, regarding benefits of Jeevatu, is not proper. Only limited people are aware of it and a large number of communities are still using other harmful chemical pesticides and fertilizers.

#### Institution strengthening

#### Institutions have been strengthened / established

yes, a little

yes, moderately yes, greatly

## Type of support

financia

capacity building/ training

equipment

#### at the following level

local

regional national Describe institution, roles and responsibilities, members, etc.

#### Further details

Trainings were provided to the local communities in order to enlighten them about the benefits of the use of Jeevatu and to enable them to provide such awareness to other nearby local communities.

#### Monitoring and evaluation

area treated aspects were monitored by government through observations no. of land users involved aspects were monitored by other through observations There were no changes in the Approach as a result of monitoring and evaluation

#### Research

Research treated the following topics

sociology

economics / marketing

ecology

technology

Research was carried out on-farm

## FINANCING AND EXTERNAL MATERIAL SUPPORT

## Annual budget in USD for the SLM component

< 2.000

2.000-10.000

10,000-100,000 100,000-1,000,000

> 1.000.000

Precise annual budget: n.a.

Approach costs were met by the following donors: government (NARC); national non-government (NFI); private sector (Nepalese Natural Bio-products)

The following services or incentives have been provided to land

Financial/ material support provided to land users Subsidies for specific inputs

Other incentives or instruments

Financial/ material support provided to land users

#### IMPACT ANALYSIS AND CONCLUDING STATEMENTS

Impacts of the Approach

Did the Approach help land users to implement and maintain SLM Technologies?

People, after the approach, acquired different information regarding the harms due to the extensive use of chemical pesticides and fertilizers and also learnt how Jeevatu had a significant advantage over them. It resulted in reduction of the use of those harmful chemicals and hence greatly promoted sustainable land management.

Did the Approach empower socially and economically disadvantaged groups?

Jeevatu is available for just Rs.100 per bottle. This enabled the economically disadvantaged groups to take active part in using Jeevatu, increasing their agriculture yield and hence contribute to sustainable land management.

Did the Approach improve issues of land tenure/ user rights that hindered implementation of SLM Technologies? there was no hindrance. The problem is likely to be overcome in the near future. approach creates a framework to use in the future

1

, little , moderately

No Yes, Yes, Yes,

/

Did other land users / projects adopt the Approach?

Nearby local communities also adopted Jeevatu as the message was transferred through the local people.

# /

#### Main motivation of land users to implement SLM

increased production

increased profit(ability), improved cost-benefit-ratio reduced land degradation

reduced risk of disasters

reduced workload

payments/ subsidies rules and regulations (fines)/ enforcement

prestige, social pressure/ social cohesion

affiliation to movement/ project/ group/ networks

environmental consciousness

customs and beliefs, morals

enhanced SLM knowledge and skills

aesthetic improvement

conflict mitigation

well-being and livelihoods improvement

#### Sustainability of Approach activities

Can the land users sustain what hat been implemented through the Approach (without external support)?

no ves

uncertain

#### **CONCLUSIONS AND LESSONS LEARNT**

#### Strengths: land user's view

 It has inceased the net profit. (How to sustain/ enhance this strength: If the price can be further lowered, then it can be more efficient.)

#### Strengths: compiler's or other key resource person's view

- 1) helps to preserve crop production as well as its protection.
- 2) Helps in composting, treating plant diseases.
- 3) Jeevatu also helps in waste management.
- 4) It helps to reduce the filthy smells of boars, dung and other animals.
- 5) Jeevatu helps in treating different plants related diseases. (How to sustain/ enhance this strength: Jeevatu is a local productio.So,if it introduced globally, then it can be commercialized and many people can be benefitted by its result.

By its proper use as instructed by the experts.)

Weaknesses/ disadvantages/ risks: land user's viewhow to overcome

Weaknesses/ disadvantages/ risks: compiler's or other key resource person's viewhow to overcome

 Approach was based on small communities which made the information flow very limited such awareness projects should be developed at a large scale basis to spread the message effectively

## REFERENCES

**Compiler** Sabita Aryal **Editors** 

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Resource persons

Sabita Aryal (sabita@ku.edu.np) - SLM specialist Tenzing Sherpa . C - SLM specialist Ozal Pradhan - SLM specialist Bharat Kumar Poudyal - SLM specialist

#### Full description in the WOCAT database

https://qcat.wocat.net/af/wocat/approaches/view/approaches\_2484/

Linked SLM data

n.a.

Documentation was faciliated by

Institution

• Kathmandu University (KU) - Nepal

Project

• n.a

Reviewer Fabian Ottiger Joana Eichenberger

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