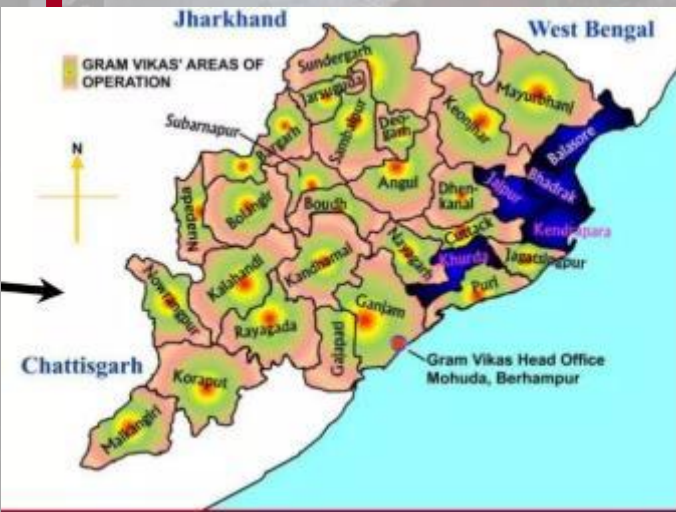


To Study & Compare the Impacts and Challenges Of Backyard Garden Using Greywater In Plain And Hilly Region Of Rural Odisha



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Content



Research topic



Objective



Context –
Literature review



Conceptual
framework



Methodology



Case Studies



Analysis and
discussion



Suggestion



Commendation



Feedback

Research Topic

To Study & Compare the
Impacts and Challenges Of
Backyard Garden
Using Greywater In Plain
And Hilly Region Of Rural
Odisha.



Objective



To understand the use of greywater management at a very simple level with minimal resources.



To understand how greywater can be used in for backyard gardening.



To understand the impact and challenges faced by community as well as the organization in implementation as well as maintaining the project.

Literature Review



What is greywater

Greywater is defined as domestic wastewater created in residences or office buildings from uncontaminated streams, excluding wastewater from toilets. Sinks, showers, bathtubs, washing machines, and dishwashers are all sources of greywater.

Need of managing greywater

- Freshwater Conservation
- Reduction of water wastage
- Reduction in energy consumption
- Reduced chemical consumption
- Increase in green cover
- Reuse of nutrients
- Groundwater replenishment/recharge
- Prevention of greywater stagnation
- It prevents vector breeding
- It's use in flushing toilets to make toilets functional

Importance of a backyard garden

- For community mobilization
- To strengthen dietary diversity intake
- Can provide educational opportunities.
- Saves people money as well as carbon footprint

Conceptual Framework

Rationale of the Study

- I used greywater for my research as it is the most easily treatable wastewater. Moreover, not much research studies are available about constructing backyard garden using greywater.
- Although the Government is implementing water reuse methods under Swatch Bharat Abhiyan but Gram Vikas is reaching out to the hard-to-reach areas and training community to reuse greywater with minimal resources.

❖ Based on literature review, divided impact assessment into 2 categories-

Economic	Environmental
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Methodology

Villages from Ganjam (plain) and Gajapati (terrain) districts of Odisha where Gram Vikas is currently working on Nutrition Garden using Greywater have been selected for the data collection. Using same questionnaire in both the regions a comparative study will be done to understand the impact and challenges faced by kitchen garden using greywater which is generally consider as wastewater.

Villages were selected on the status of work being done such as-

- Village with community backyard garden
- Village with Household backyard gardens
- Village where the work has just been started
- Village where its community backyard garden is there but only the landowner is getting benefited.

2 KII were conducted in each region with the District Manager of Gumsur and Field Expert at Koinpur Office of Gajapati districts. Along with these, 4 Face-to-face interviews were conducted with the presidents of Village Development Committee (VDC) of the villages in both the districts. Also, conducted 2 FGD with SHG and VDC member of Noragadu and Tumbo village in Ganjam and Gajapati District, respectively.

Case Study: Ganjam District (plain)



Villages visited-

- Noragadu
- Badhav Bhumi
- Gramdevati
- K Piri Gachha



Case Study : Gajapati District (hilly)



Villages visited-

- Belapadar
- Kinnoda
- Landu Shai
- Tumbo



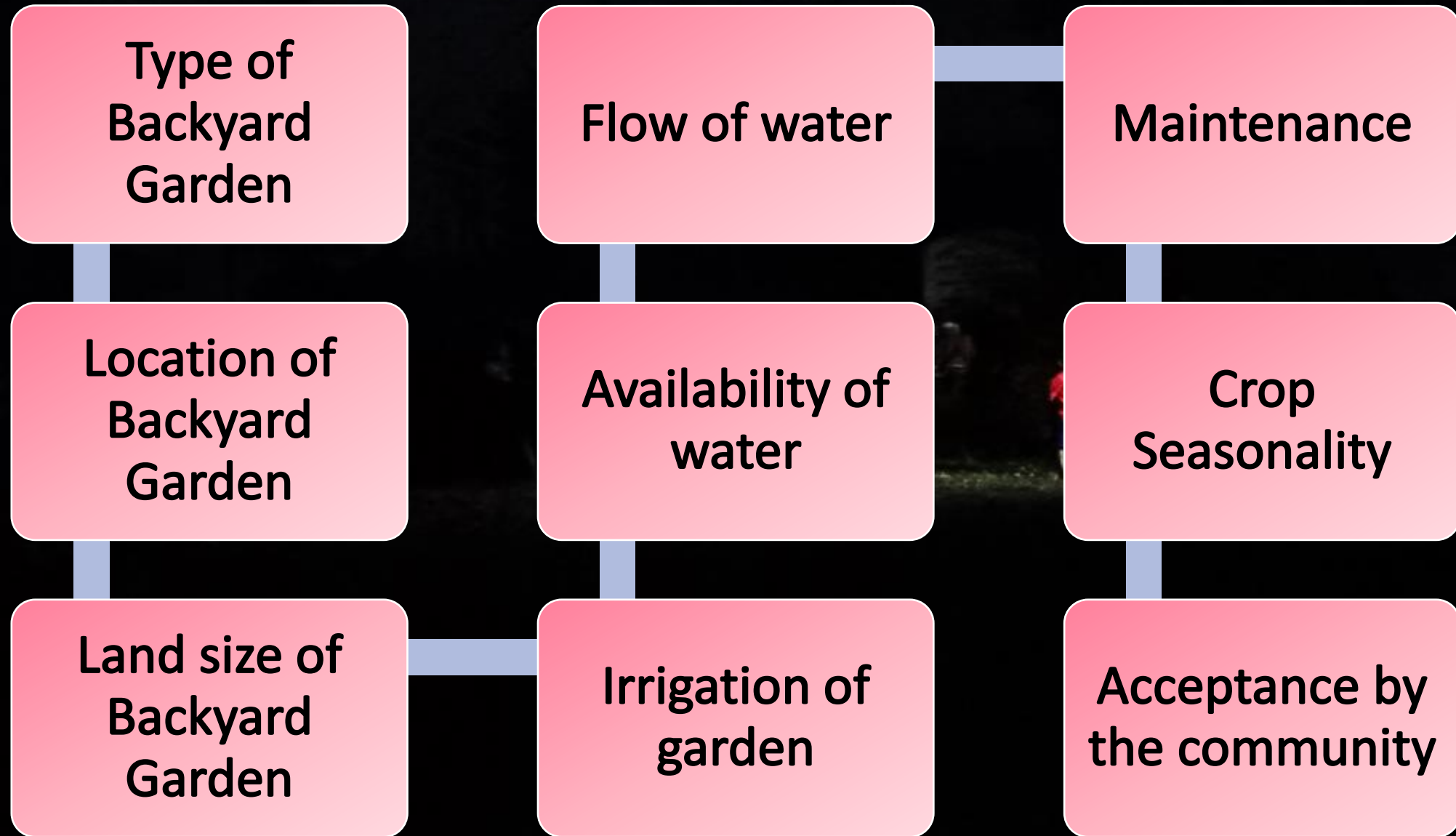
**Analysis
&
Discussion**

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graph TD; A["Analysis  
&  
Discussion"] --- B["Differences"]; A --- C["Similarities"];
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Differences

Similarities

Difference



Similarities

Lack of Awareness/Negligence

- Crop Seasonality
- Efficient use of space

Impact

- Economic
- Environmental





Suggestion

- Treatment of the water
- Proper channelising or irrigation system
- Plantation or soak pits near the handpump or community taps.
- SHGs could be updated with the MSP
- Knowledge about crop seasonality

Commendation



Remark of VDC president of Noragadu about the project “*Aage amar gaa ra lok Greywater ke atki samarthan nei de e thir, lekin abe sab lok etki prabhabit he e gale jeki sab lok aha ku khet re bi byabahar karbar lagi chahuchhanti.*” (earlier the villagers were not much accepting to the idea but now with time they are so impressed that they would like to use this system at a larger scale to the agricultural fields)



Remark of Gram Devati VDC member “*Amke bahut bhal lagla je ki tame gute etki dur Rajasthan ru amar gaa ke janba lagi asichha, etir lagi amar gaa ke gute chinhat milba.*” (We liked it very much that you come from so far from Rajasthan to learn about our village, it will also give our village also recognition)



KINEMASTER





Feedback

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