



Course Name: Rural Planning Studio
Course Code: URP 3112

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PROJECT TITLE

Assessing the impact of flood on farming in the rural area: A case study of Talukkanapur Union, Gaibandha.

Introduction

➤ Background

- Flood has a huge impact on the rural livelihood as well as the agricultural production including livestock's. Talukkanupur, a union of Gaibandha district is one of the mostly affected areas in Bangladesh by flood where every year the agricultural production hampers by flood badly. This study can help the local government with valuable data for future necessary steps including farming development in the flood prone area.

➤ Objectives

- I. To find out the impact of flood on the farming field.
- II. To find out the outcome of the farming production before flood and after the flood.



Study Area



Figure 01: Gaibandha district in Bangladesh Map

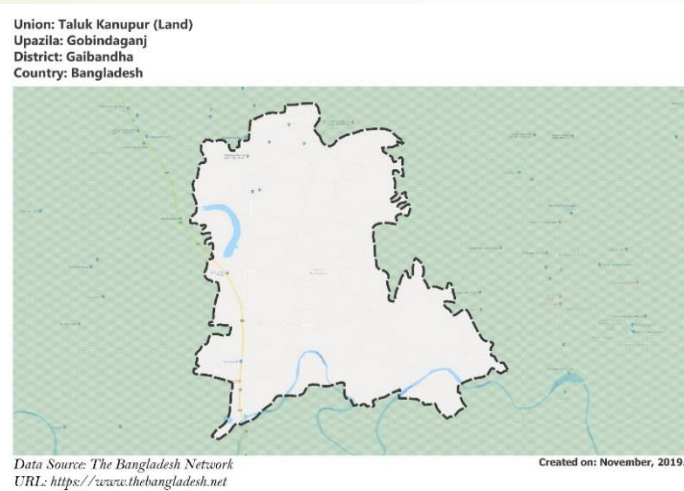


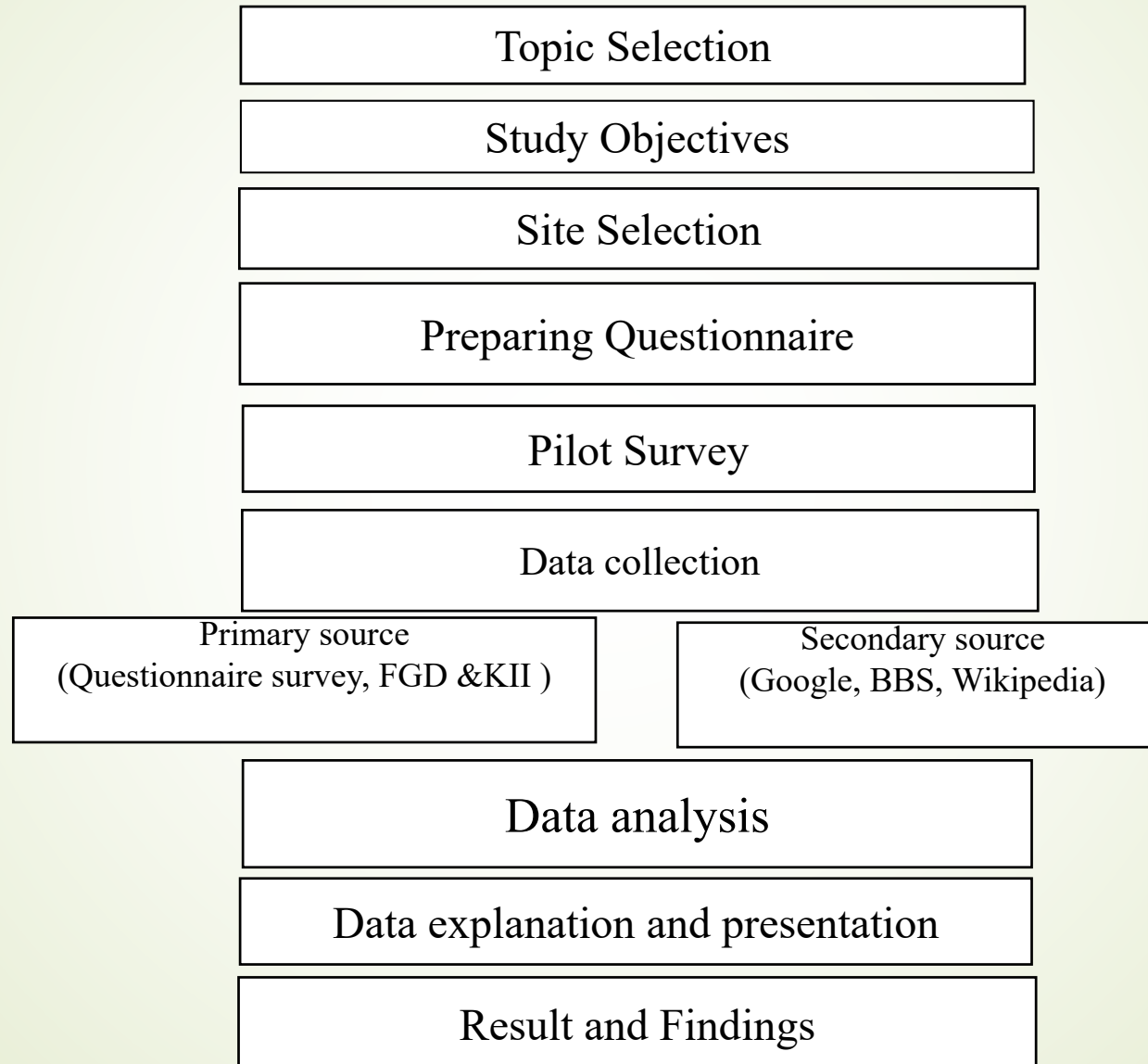
Figure 2: Talukkanupur Union

Although Talukkanupur area of Gaibandha district is located in Bengal's broader flood-prone floodplain, its land structure and formation differ from those of the other areas of Gaibandha district due to changes in river flow and land raising caused by earthquakes.

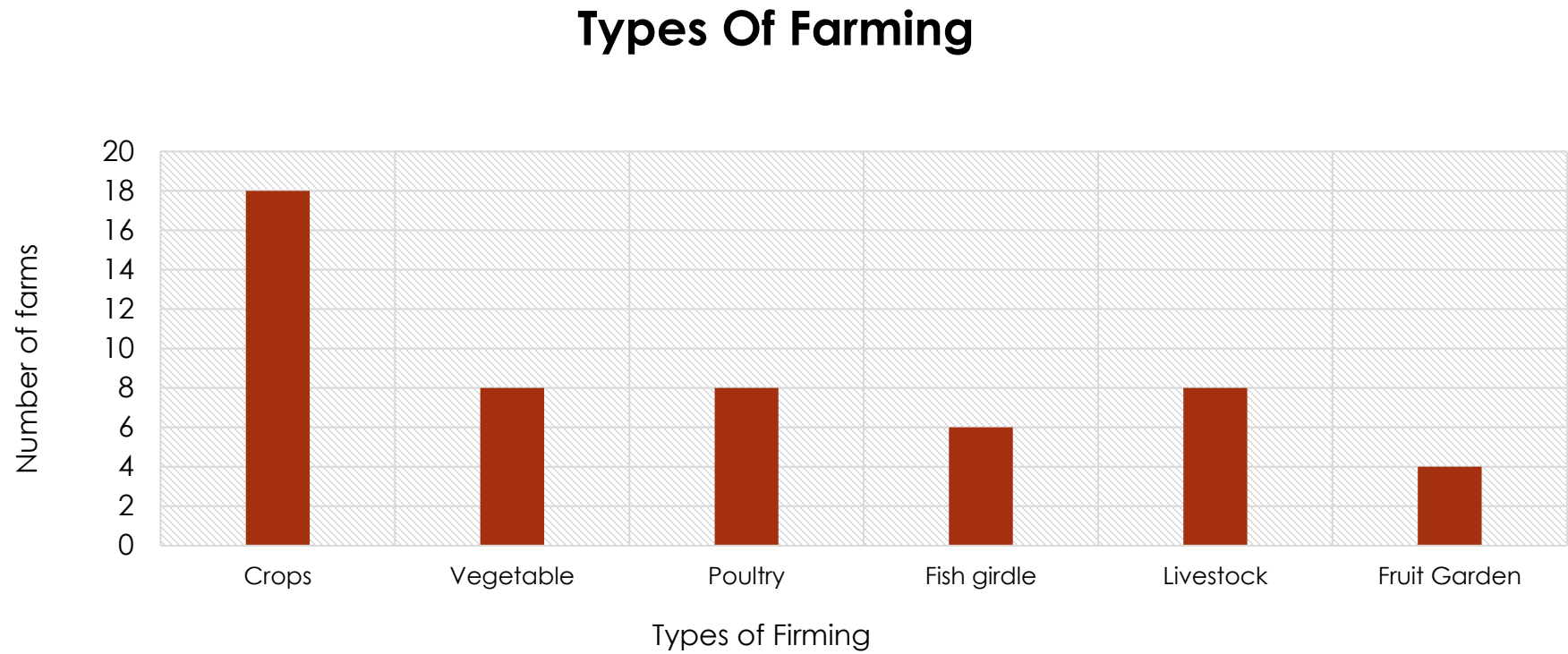
The entire Talukkanupur area is made up of fertile soils, which is ideal for growing a variety of agricultural grains.

The area's main issue is river erosion and flooding produced by the Brahmaputra's rivers.

Methodology



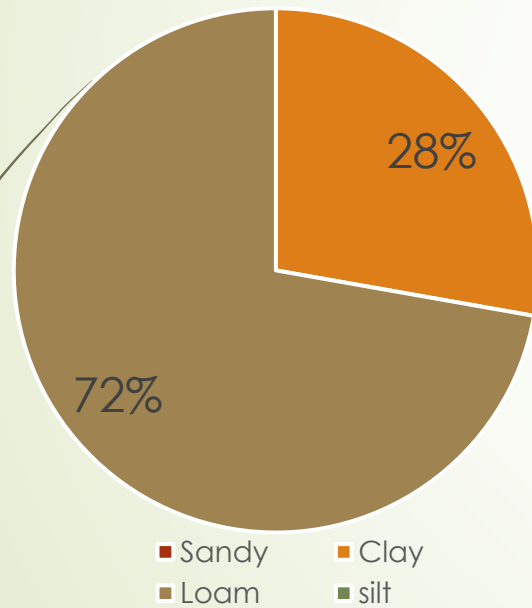
Data Analysis



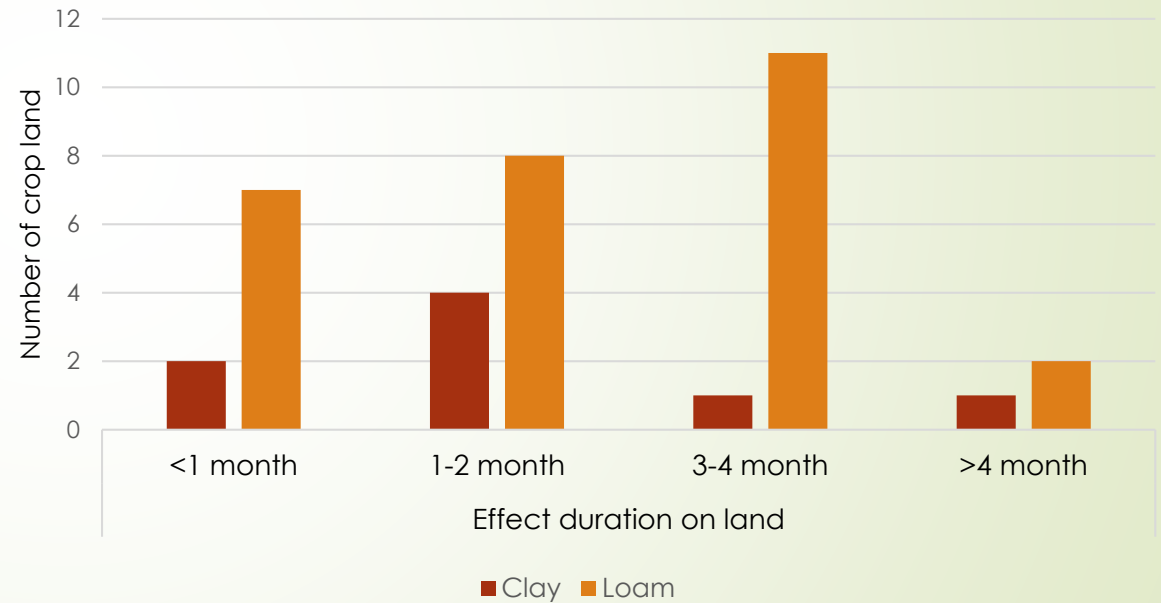
Data Analysis

• Crop Field

Soil type

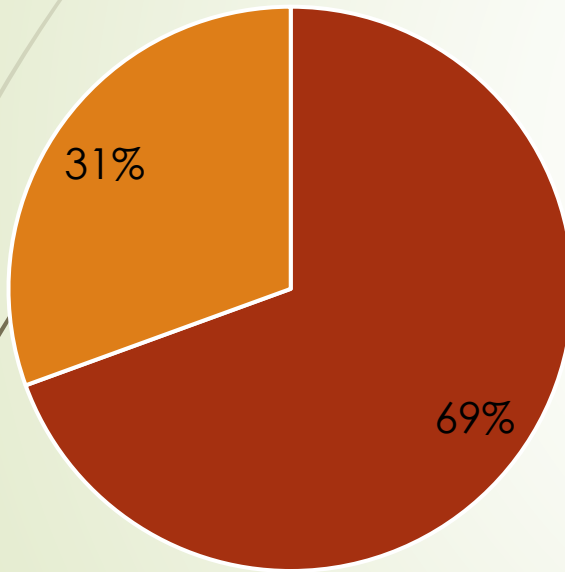


Relation between soil type of the crop land and flood effect duration on land



Data Analysis

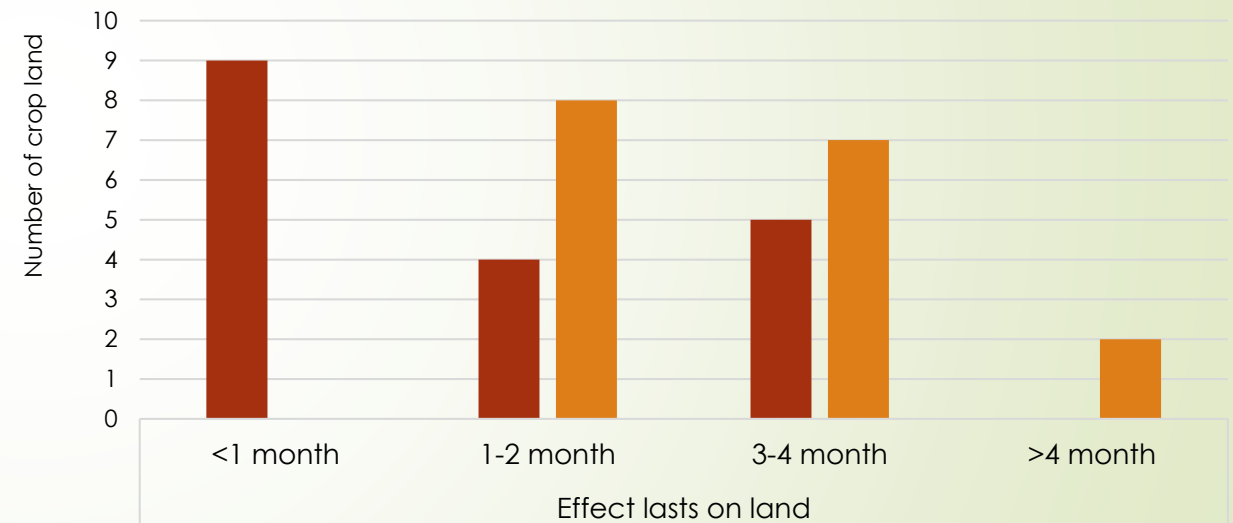
Effect of flood on Crop Field



■ Water logging ■ Flooded

• Crop Field

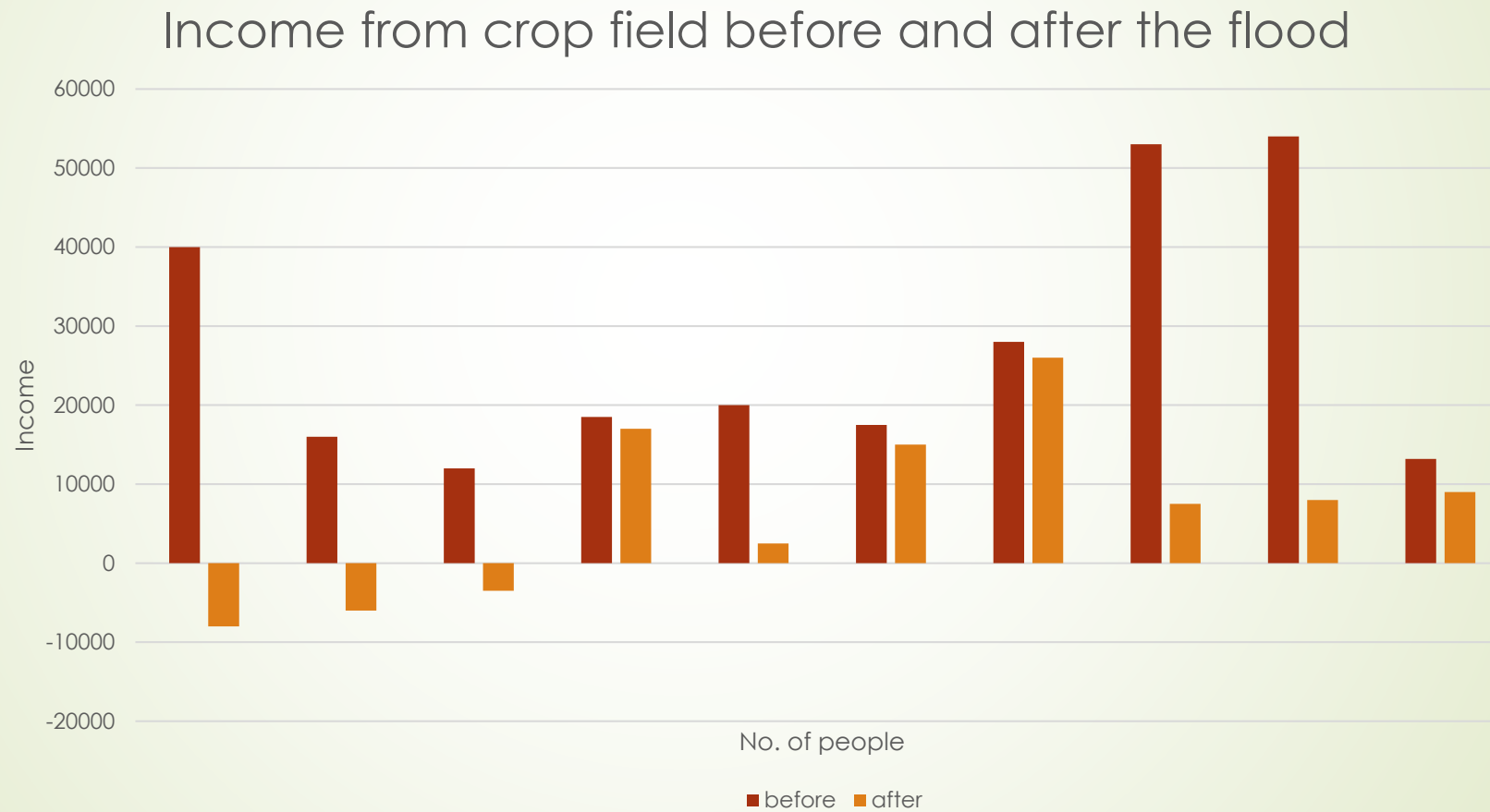
Relation between effects of flood on crop land and the flood effect duration on crop land



■ Water logging ■ Flooded

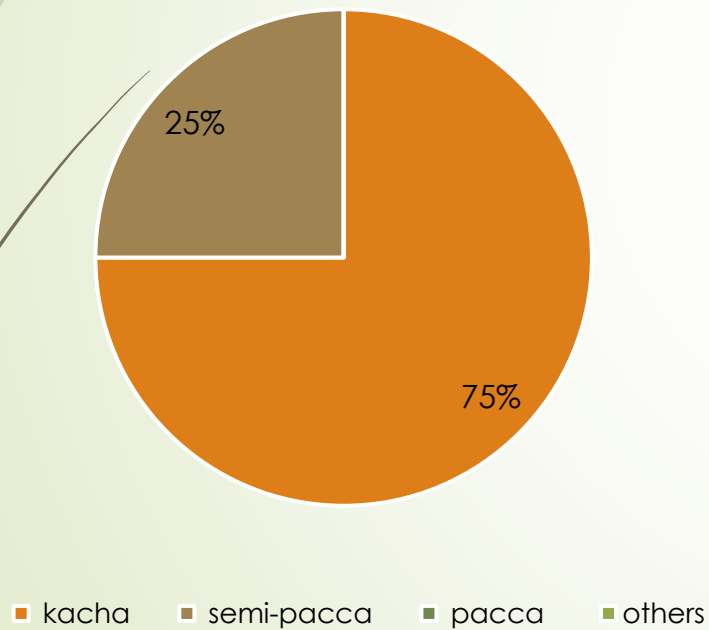
Data Analysis

- **Crop Field**



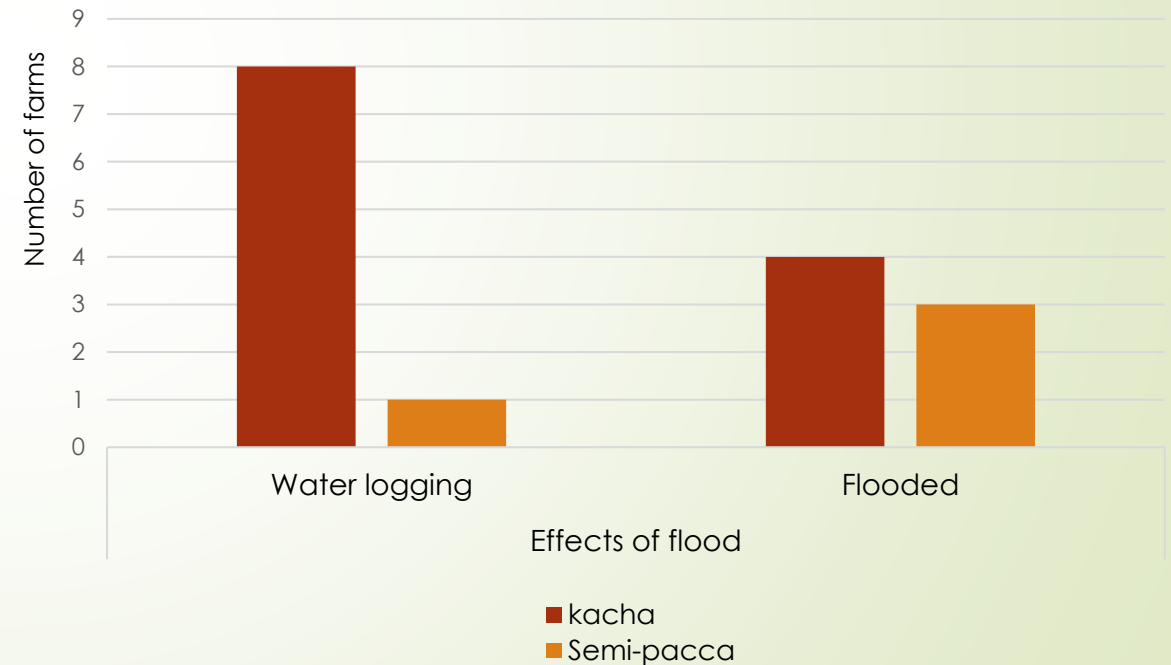
Data Analysis

Structure of Livestock farm



• Livestock Farm

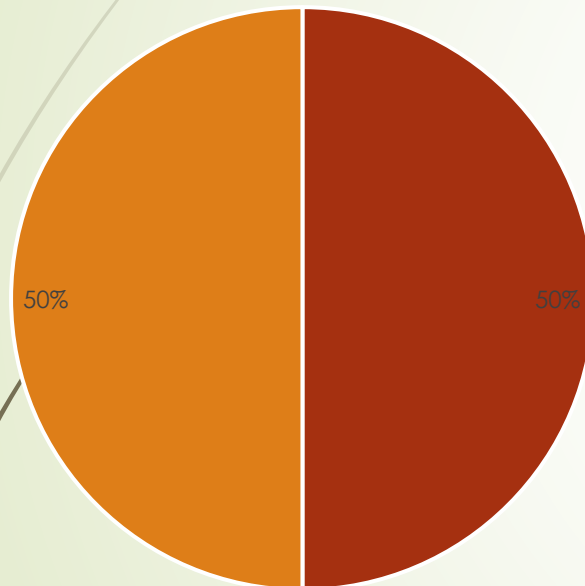
Relation between structure of livestock farms and effect of flood on the livestock farm



Data Analysis

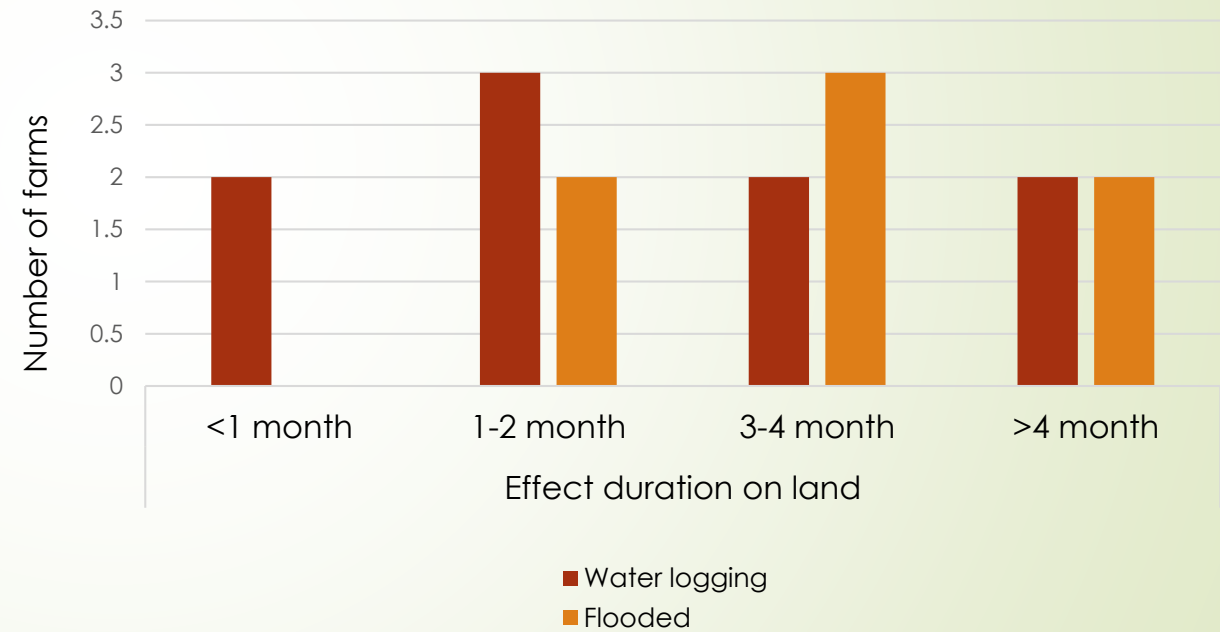
• Livestock Farm

Effect on Livestock Farm



■ Water logging ■ Flooded

Relation between the effect of flood on the livestock farm and duration of flood effect on farm



Data Analysis

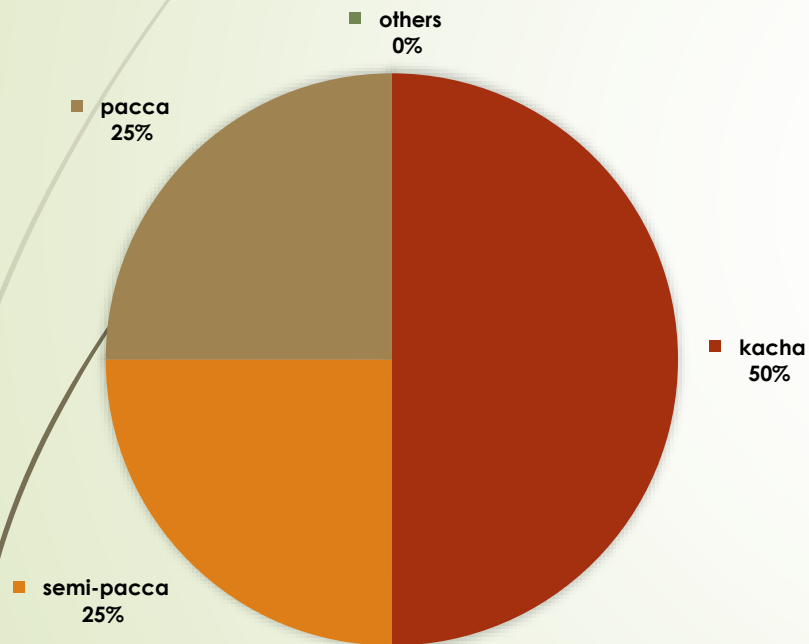
- **Livestock Farm**

Effect last for on land	Income of Livestock farm after flood				
	<1000	1000-5000	6000-10000	>15000	
<1 month	0	1	2	0	
1-2 month	0	3	0	0	
3-4 month	2	1	2	0	
>4 month	4	0	0	2	

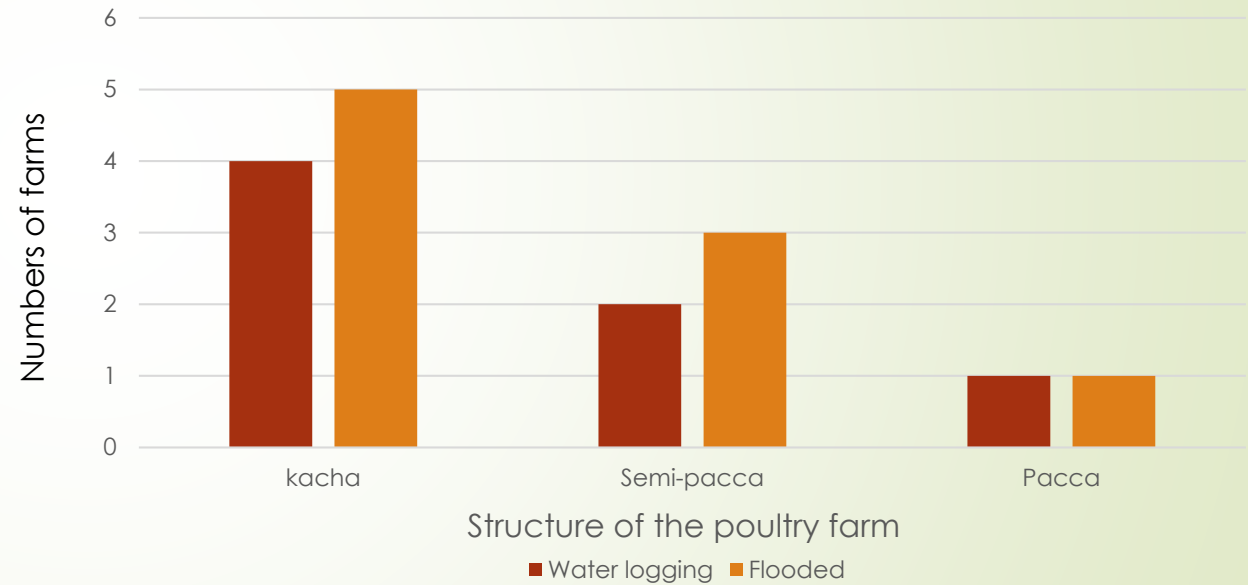
Data Analysis

• Poultry Farm

STRUCTURE OF POULTRY FARM

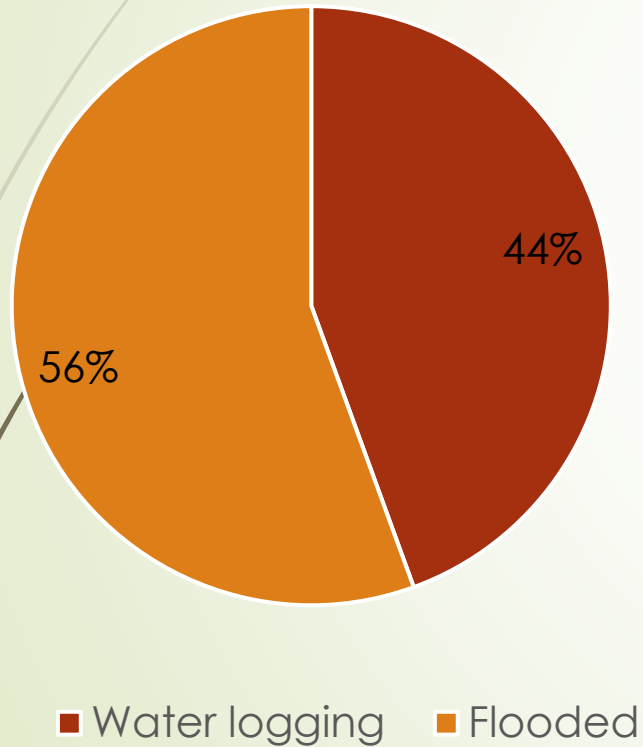


Relation between the structure of poultry farm and effects of flood on the poultry farm



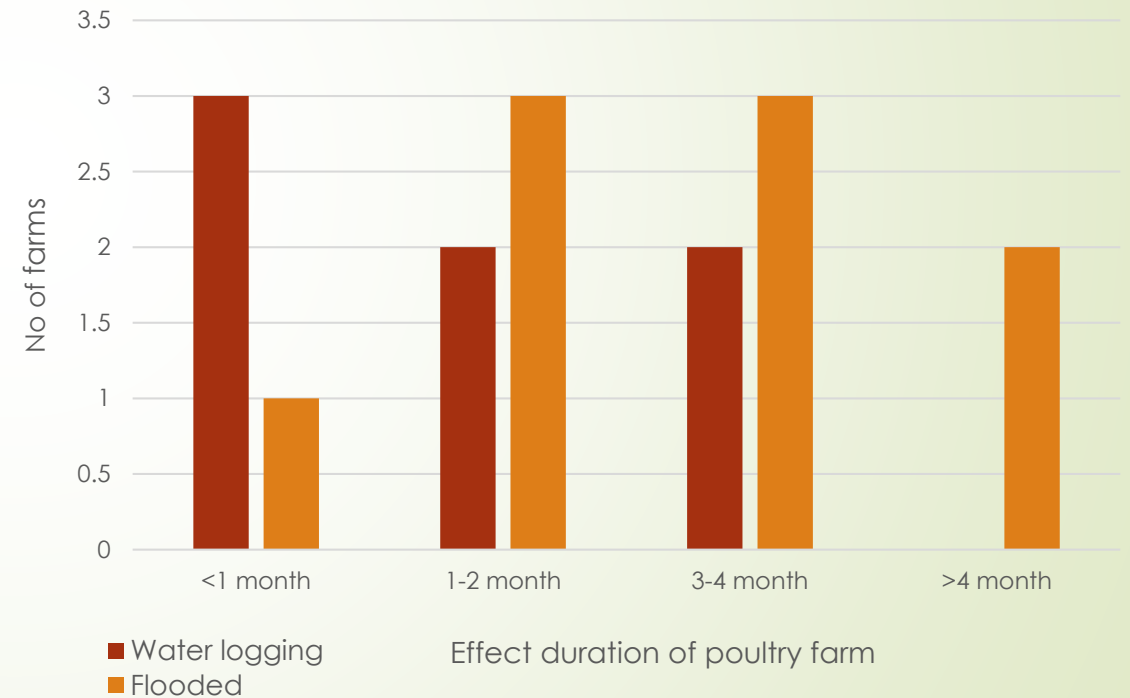
Data Analysis

Effect on Poultry farm



• Poultry Farm

Relation between effects of flood on poultry farm and effect duration on poultry farm



Data Analysis

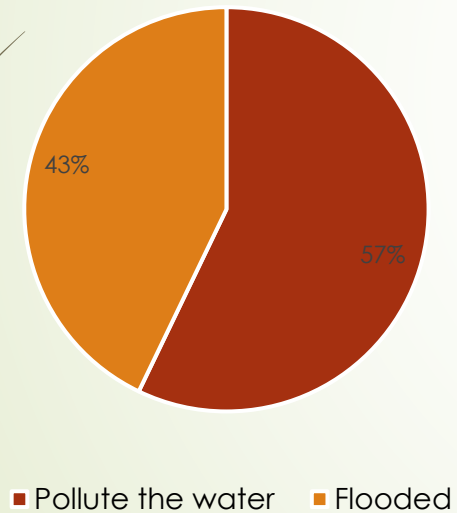
• Poultry Farm

Effect last for on land	Income from Poultry farm after flood			Total
	<1000	1000-5000	5000-10000	
<1 month	1	1	2	2
1-2 month	5	2	0	7
3-4 month	3	2	0	5
>4 month	0	0	2	2

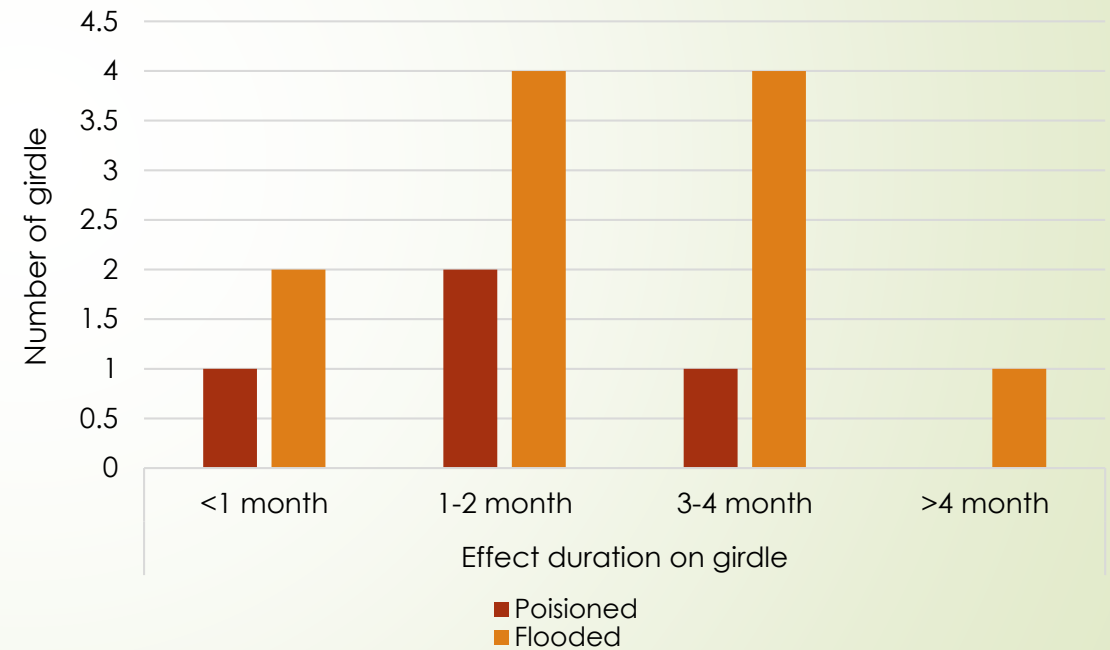
Data Analysis

• Fish Girdle

Effect on fish girdle

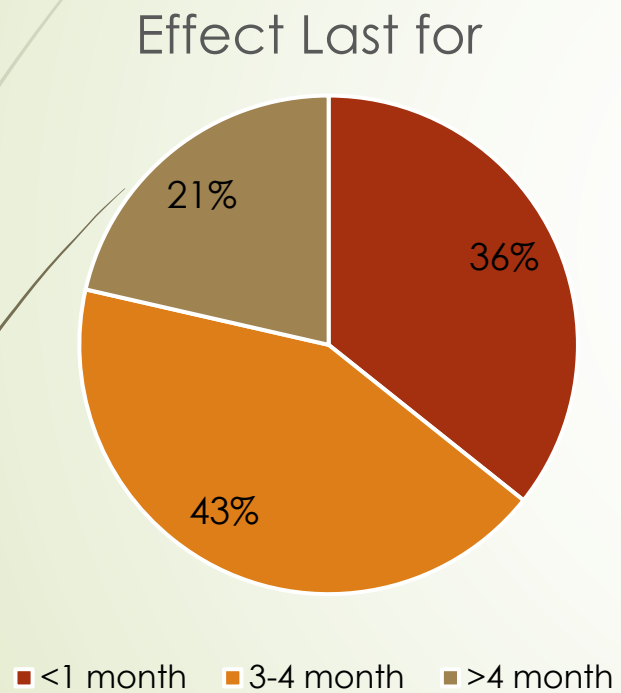


Relation between effects of flood on fish girdle and effect duration of the girdle.



Data Analysis

• Fish Girdle

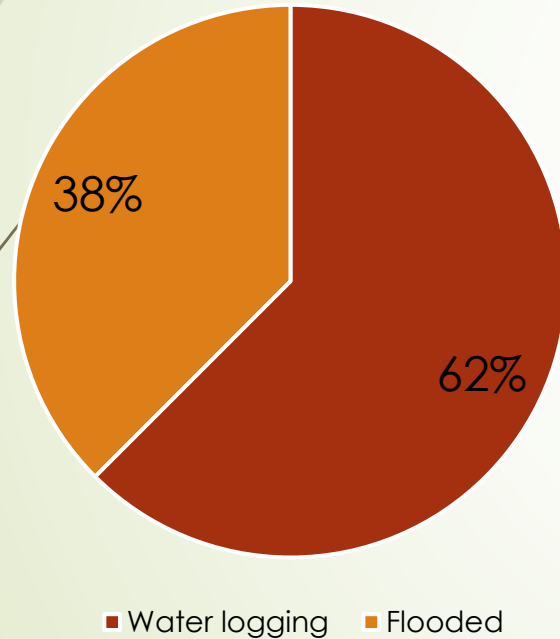


Effect last for on land	Income from Fish girdle after flood			
	<1000	1000-5000	6000-10000	
<3 month	2	2	1	
3-4 month	2	2	2	
>4 month	2	0	1	

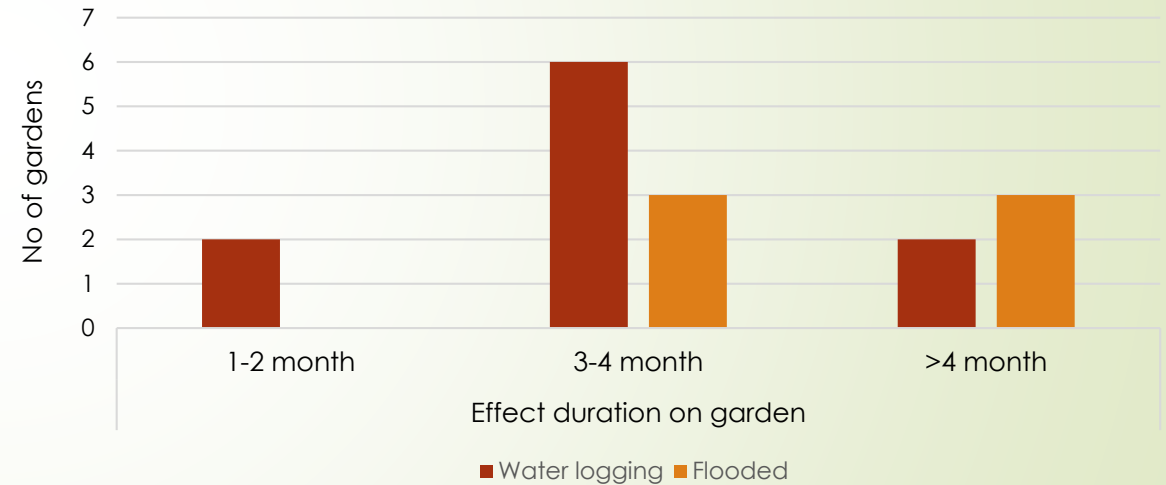
Data Analysis

- **Vegetable Garden**

Effect on vegetable garden



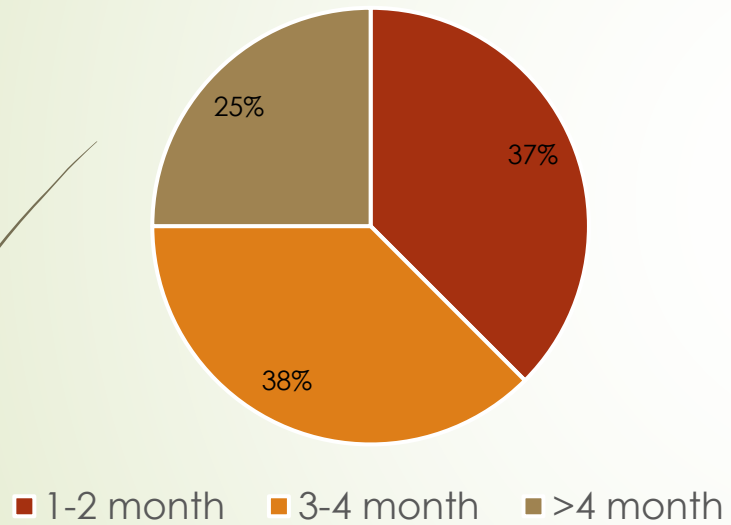
Relation between effect of flood on vegetable garden and effect duration on garden



Data Analysis

• Vegetable Garden

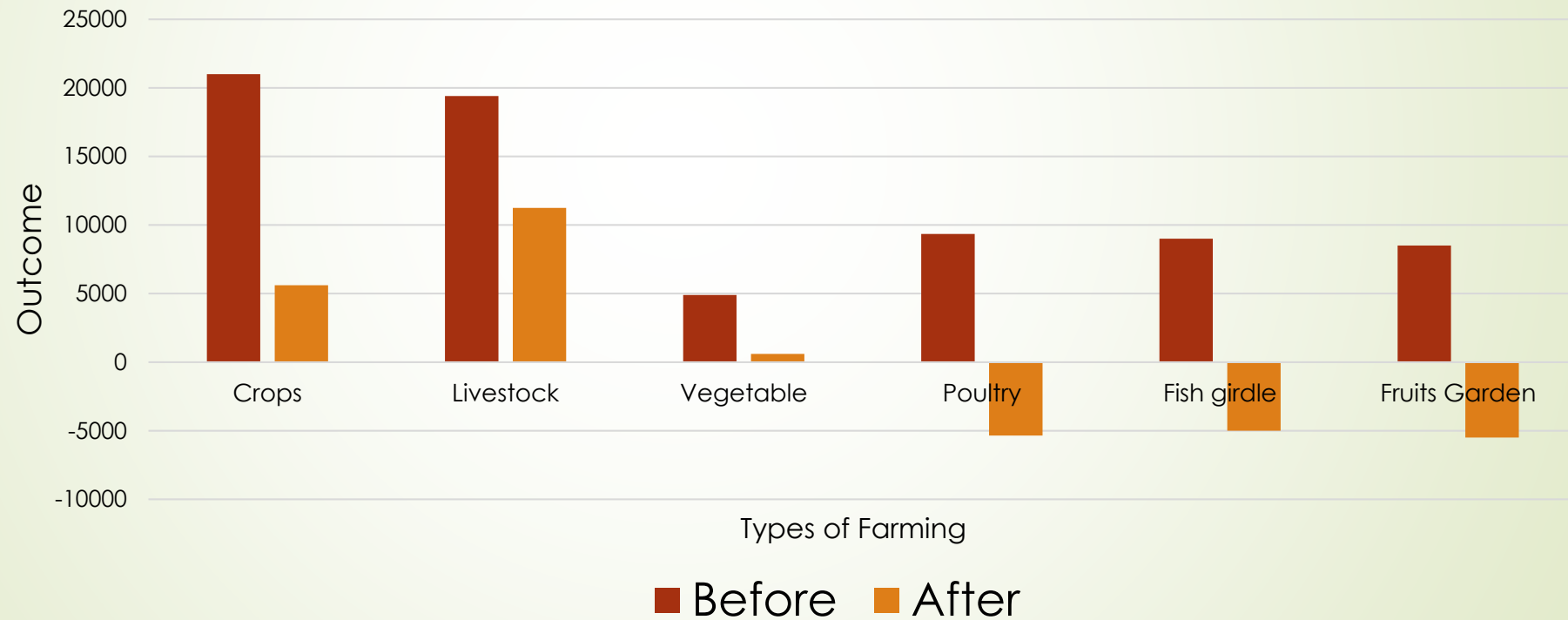
Effect Duration



	Income of vegetable garden after flood				Total
	<500	600-2000	3000-5000	8000-10000	
Effect duration <2 month	0	2	3	1	6
3-4 month	4	2	0	0	6
>4 month	1	0	1	2	4

Data Analysis

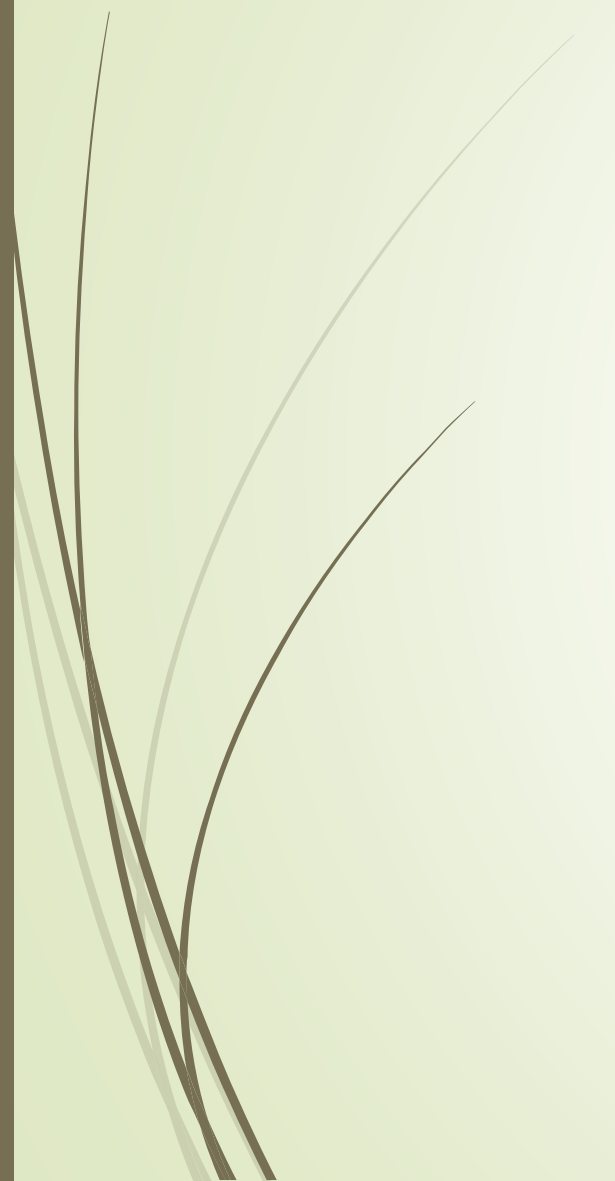
Change in Average outcome from different farming field before and after flood



Findings

- Almost all type of farming land affected by flood in July-August and sometimes the flood effects remains more than 4 months.
- Most of the farming field face water logging or become flooded away.
- Katcha livestock farms are affected more badly than pacca ones.
- When the effect last for too long the farming field become unsuitable for next season also.
- These effect make a huge impact on the output of the farming production.
- The expected outcome do not come and so farmers face a huge loss.

Recommendation



 Thank You