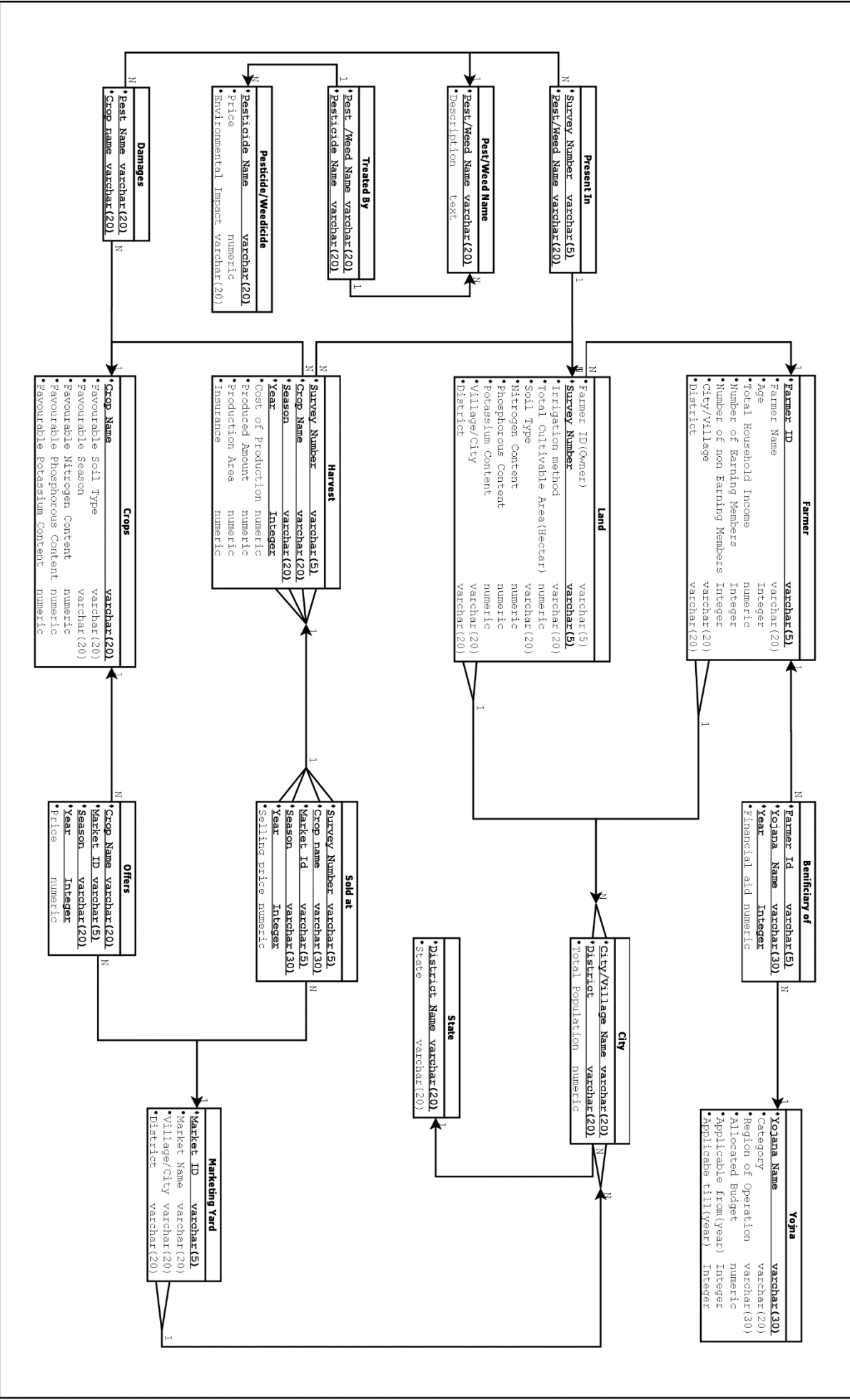


Relational Schema
And
Functional Dependencies
And
Updated ER Diagram(as suggested by sir)
Agricultural Record Management System

Group 1.13

Abhi Zanzarukiya 201601027
Vismay Mahlondkar 201601029
Nikesh Parekh 201601061
Mayank Savaliya 201601025



FUNCTIONAL DEPENDENCIES

1) Farmer:

FarmerID → {Farmer Name, Age, Total household Income, Number of earning Family Members, Number of non-earning Family Members, City/Village, District}

2) Land:

Survey Number → {Farmer ID, Soil Type, Irrigation Method, Total Cultivable area, Nitrogen Content, Phosphorous Content, Potassium Content, City/Village, District}

3) Crop:

Crop Name → {Favorable soil type, Favorable Season, Nitrogen content, Phosphorous content, potassium content}

4) Market:

Market ID → {Market Name, City/Village, District}

5) Pest/Weed:

Pest/Weed Name → Description

6) Pesticide/Weedicide:

Pesticide Name → {Price, Environmental Impact}

7) City/Village:

City/Village, District → { Total Population}

8) Yojana Scheme:

Yojana Name → {Category, Region of Operation, Allocated Budget, Applicable from year, Applicable till year}

9) Harvests:

{Survey Number, Crop Name, Season, Year} → {Cost of Production, Produced Amount, Production Area, Insurance}

10) Offers:

{Crop Name, Market ID, Season, Year} → Price

11) Sold At:

{Survey Number, Crop Name, Year, Season, Market ID} → Selling Price

12) Damages:

All FDs are trivial. (i.e. {Crop Name, Pest/Weed Name} → {Crop Name, Pest Name})

13) Treated by:

All FDs are trivial. (i.e. {Pest/Weed Name, Pesticide Name} → {Pest/Weed Name, Pesticide Name })

14) Present:

All FDs are trivial. (i.e. {Survey Number, Pest/Weed Name} → {Survey Number, Pest/Weed Name })

15) Beneficiary of:

{Farmer Id, Yojana Name, Year} → Financial aid

16) State:

District → State

All the Relations in our Relational Model are in BCNF.

UPDATED E R DIAGRAM(As suggested by sir)

