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NeGP
AGRICULTURE
 EMPOWERING FARMERS

Agricultural Mission Mode Project under National e-Governance Plan

Kerala State Agricultural Portal Software Requirement Specifications

“The State Agriculture Portal would be the front end for all the services’ delivery in Agriculture MMP. A farmer would typically come to SAP to find information / avail any service through CSC / Internet.”



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1. INTRODUCTION

1.1 Purpose

State Agricultural Portal (SAP) is the interface of the Agricultural Departments of the States for providing information services to all stakeholders in the agricultural sector (Agriculture, Livestock and Fisheries) especially farmers, livestock and fish-farmers. This document describes the Software Requirements Specification for the Kerala State Agricultural Portal. Purpose of this document is to provide detailed specifications for the development of the portal, a document for validating quality needs, testing of the artifacts and components of the portal and a reference document for the SAP of Kerala.

1.2 About Kerala

Keralam, the land of kera or coconut, is an Indian state located on the Malabar Coast of south-west India. It was formed on 1 November 1956 by the States Reorganization Act by combining various Malayalam speaking regions. There are 14 districts in Kerala. Thiruvananthapuram is the State capital. Kochi and Kozhikode are other major cities. Kerala is a popular destination for its backwaters, beaches, Ayurvedic tourism and tropical greenery.

1.2.1 GEOGRAPHY

Kerala lies along the coastline, to the extreme south west of the Indian peninsula, flanked by the Arabian Sea on the west and the mountains of the Western Ghats on the east. Located between north latitudes 8^o18' and 12^o48' and east longitudes 74^o52' and 72^o22', it stretches north-south along a coastline of 580 kms with a varying width of 35 to 120 kms. The state has an area of 38,863 km² and is bordered by Karnataka to the north and northeast, Tamil Nadu to the east and south, and the Arabian Sea on the west.

The topography and physical characteristics change distinctly from east to west. Based on nature of the terrain and its physical features, Kerala can be divided into three climatically distinct regions geographically: the eastern highlands (rugged and cool mountainous terrain), the central midlands (rolling hills), and the western lowlands (coastal region). Located at the extreme southern tip of the Indian subcontinent, Kerala lies near the centre of the Indian tectonic plate; hence, most of the state is subject to comparatively little seismic and volcanic activity.

The eastern region of Kerala, immediately west of the Western Ghats' rain shadow, consists of high mountains, gorges and deep-cut valleys and covered with dense forests. Almost all the rivers of the state originate here. There are 44 rivers in the state, of which 41 originate from the Western Ghats and flow towards west into the Arabian Sea. Only three tributaries of the river Cauvery originate in Kerala and flow east into the neighbouring States. These rivers and streams flowing down from the Western Ghats either empty themselves in to the backwaters in the coastal area or directly into the Arabian Sea. As the Western Ghats are nowhere more than 120 kms from the sea, all these rivers are comparatively short.

The Western Ghats bordering the eastern boundary of the State, form an almost continuous wall of mountains interrupted only near Palakkad (hence also known Palghat), where the Palakkad Gap breaks through to provide access to the rest of India. The Western Ghats rises on an average to 1,500 m (4920 ft) above sea level, while the highest peaks reach above 2,500 m (8200 ft). Anamudi, the highest peak in South India, is at an elevation of 2,695 metres (8,842 ft). From the Ghats, the land slopes to the west on to the plains, into an unbroken coastline.

Just west of the mountains lie in the midland plains comprising central Kerala, dominated by rolling hills and wide valleys. The valleys have been developed as paddy fields and the elevated lands and hill slopes are converted into estates of rubber, fruit trees and other cash crops like pepper, arecanut and tapioca. Tea and coffee estates have cropped up in the high ranges during the last two centuries.

Kerala's western coastal belt is relatively flat, and is criss-crossed by a network of interconnected brackish canals, lakes, estuaries, and rivers known as the Kerala Backwaters. Lake Vembanad, Kerala's largest water body, dominates the Backwaters; it lies between Alappuzha and Kochi and is more than 200 km² in area. Extensive paddy fields, thick groves of coconut trees and picturesque backwaters, interconnected with canals and rivers, are the features of this region.

Backwaters and Rivers

The backwaters are a peculiar feature of the state. Canals link the lakes and backwaters to facilitate an uninterrupted inland water navigation system from Thiruvananthapuram to Vadakara, a distance of 450 kms. Around 8% of India's waterways (measured by length) are found

in Kerala. The Vembanad lake stretching from Alappuzha to Kochi is the biggest water body in the state and is over 200 sq.kms. in area. Kuttanad in Alappuzha district alone has more than 20 per cent of India's total length of waterways.

The most important of Kerala's forty-four rivers include the Periyar (244 km), the Bharathapuzha (209 km), the Pamba (176 km), the Chaliyar (169 km), the Kadalundipuzha River (130 km), the Valapattanam (110 km), Chalakudy river (130 kms.) and the Achankovil (128 km). The average length of the rivers of Kerala is 64 km. Many of the rivers are small and entirely fed by monsoon rains. These conditions result in nearly year-round water logging of such western regions as Kuttanad, 500 km² of which lies below sea level. As Kerala's rivers are small and lack deltas, they are more prone to environmental factors. The rivers also face problems such as sand mining and pollution. The state experiences several natural hazards such as landslides, floods, lightning and droughts. The state was also affected by the 2004 Indian Ocean Tsunami.

A catastrophic flood in Kerala in 1341 CE drastically modified its terrain and consequently affected its history. The course of the river Periyar was changed, and the Arabian Sea receded several miles. The Kuttanad region became cultivable, and the Muziris (Kodungalloor) harbour became defunct. A new harbour was developed at Kochi.

1.2.2 CLIMATE

With 120–140 rainy days per year, Kerala has a wet and maritime tropical climate influenced by the seasonal heavy rains of the southwest summer monsoon and northeast winter monsoon. About 65 percent of the rainfall occurs during the first season (June to August), corresponding to the southwest monsoon, and the rest during the second season (September to December), corresponding to northeast monsoon. It is the first state in India to receive rain from Southwest Monsoon. In eastern Kerala, a drier tropical wet and dry climate prevails. Kerala receives an average 3,107 mm (122 in.) rainfall annually. Some of Kerala's drier lowland region's rainfall average is only 1,250 mm (49 in.). The mountains of eastern Idukki district receive more than 5,000 mm (197 in.) of orographic precipitation, the highest in the state.

During summer, Kerala is prone to gale force winds, storm surges, cyclone-related torrential downpours, occasional droughts, and rises in sea level. The mean daily temperature ranges from 19.8 °C to 36.7 °C. Mean annual temperature ranges from 25.0–27.5 °C in the coastal lowlands to 20.0–22.5 °C in the eastern highlands.

1.2.3 AGRICULTURAL SECTOR IN KERALA

The agricultural and fishing sectors dominate the economy of Kerala. Together these two sectors generate 63.8% of Gross Domestic Product (GDP) of the State. Related Animal Husbandry is an important sector for alleviating rural poverty and unemployment among women, the marginalized and the landless.

1.2.3.1 AGRICULTURAL CROPS

Nearly half of Kerala's people are dependent on agriculture alone for income. Rice is most important staple food and cereal crop for Kerala. Around 600 varieties of rice are harvested in Kerala. Other key crops include coconut, tea, coffee, rubber, cashews, and spices—including pepper, cardamom, vanilla, cinnamon, and nutmeg.

The following table gives area under major crops in Kerala and production.

Major Crops (2000-2001)	Area ('000 ha)	Production ('000 tonnes)
Rice	347.46	751.3
Tapioca	114.61	2586.9
Banana & Other Plantain	99.41	731.65
Coconut	925.78	5536
Arecanut	87.36	87.95
Pepper	202.13	60.93
Rubber	474.36	579.87
Ginger	11.61	42.70
Cardamom	41.29	7.58
Tea	36.85	69.13
Coffee	84.74	70.55

1.2.3.2 HORTICULTURAL CROPS

To bring about overall development of fruit and vegetable sector in Kerala, Vegetable and Fruit Promotion Council Keralam (VFPCCK) has been established. The Primary objective of the Council is to improve the livelihood of vegetable and fruit farmers by empowering them to carry on vegetable and fruit production, value addition and marketing as a profitable venture in a sustainable way.

Package of Practices for the following major vegetables and Fruits of Kerala are available on the website of VFPCCK.

Vegetables List

Amaranthus	Ash Gourd	Beetroot
Bhindi	Bitter Gourd	Bottle Gourd
Brinjal	Cabbage	Carrot
Cauliflower	Chilli	Cowpea

Cucumber	French Beans	Onion
Potato	Pumpkin	Radish
Ridge Gourd	Snake Gourd	Tomato

Fruit List

Banana	Jack	Pineapple
WaterMelon		

(Source: <http://www.vfpck.org>)

1.2.3.3 FISHERIES

Fishing is very important sector in Kerala. Kerala has around 222 fishing villages along the 590 km coast. Another 113 fishing villages dot the hinterland. With 590 km of coastal belt, abundant inland water resources and vast population of active fishermen, Kerala is the leading producer of fish among the states of India. According to 2003–04 reports, about 1.1 million people earn their livelihood from fishing and allied activities such as drying, processing, packaging, exporting and transporting fisheries. This contributes to about 3% of the total economy of the state.

Fisheries Resource Potential

Kerala has 287 exporters, 124 processing plants, 1585.77 Tonnes/day Freezing Capacity, 169 cold storages, 23086.50 Storage capacity and 2963 Fishing Vessels for Maritime fisheries. (Source: <http://www.mpeda.com>)

Kerala has around 14 Fishing harbors (5 under construction), 20 fish Landing Centres and 2703 Fish markets (Wholesale Markets – 185 and Retail Markets - 2518) (Source: <http://www.fishnetkerala.gov.in>)

Fisherman population of Kerala is 11.36 lakh, which include 8.28 lakh in marine and 3.28 lakh in Inland sector. Active Fishermen is estimated as 2.3 lakh (1.8 marine & 0.5 lakh in inland sector) Fishermen settlement areas spread over 222 fishing villages in marine sector and 113 villages in Inland Sector. (Source: <http://www.fishnetkerala.gov.in>)

Marine Fisheries

Kerala ranks first in marine fish production of India forming nearly 25% (on an average 6.02 lakh tonnes) of the total annual production. Currently the annual export of marine products from the state yields to the nation a foreign exchange of Rs. 1,100 crores.

Marine waters offer lucrative fishery. The output of the sector is highly seasonal in nature and the major season is during the southwest monsoon. During this season, a suspended mud bank would be developed along the shore, which in turn leads to calm ocean water and hence peak output for the fishermen. South – west monsoon coupled with northwesterly winds and the oceanic currents

cause upwelling along the coast bringing the nutrient rich deep waters to the surface, which flourishes the primary production and followed by a good fishery.

Kerala coast have major fisheries of the shrimps, cuttle fish, sardines, mackerels, anchovies, soles, sharks, rays, etc. Marine fish production in Kerala from 2001-02 to 2005-06 was given in following Table

MARINE FISH PRODUCTION IN KERALA FROM 2001-02 TO 2005-06

Sl.No.	Name of Fish	2001-02	2002-03	2003-04	2004-05	2005-06
1.	Elasmobranchs	2,991	3,197	3,066	3,044	3,160
2.	Cat fish	150	121	154	154	167
3.	Sardine	2,66,682	2,09,101	2,74,003	2,71,057	2,15,216
4.	Anchoviella	34,925	29,173	35,869	35,312	30,168
5.	Saurida & saurus	5,856	6,817	6,021	5,916	5,552
6.	Perches	30,212	40,119	31,020	30,437	30,400
7.	Sciaenids	8,863	6,093	9,056	8,992	9,887
8.	Ribbon Fish	18,364	16,082	18,815	18,657	15,679
9.	Caranx	25,110	24,855	25,721	25,419	26,987
10.	Mackerel	42,446	54,537	43,551	43,017	44,202
11.	Seer fish	2,326	3,499	2,389	2,371	2,427
12.	Tunnies	11,014	15,444	11,314	11,208	11,923
13.	Prawn	56,445	56,977	56,731	56,717	49,743
14.	Other crustacean	--	891	344	332	398
15.	Others	88,399	1,36,380	90,471	89,230	1,12,954
	Total	5,93,783	6,03,286	6,08,525	6,01,863	5,58,913

Source: <http://www.fishnetkerala.gov.in>

Inland Fisheries

Kerala has both brackish water as well as fresh water resources for inland fisheries. The total brackish water resources of the State is estimated at 1, 43,696 ha. In the inland sector, the State is endowed with a total area of about 2,26,274 ha of fresh water resources consisting of rivers, fresh water lakes, reservoirs, minor irrigation tanks, ponds etc. Of these about 1,30,000 ha area is ideally suited for freshwater fish culture.

Inland fish production provides significant contribution to animal protein supplies in rural areas of the State. Most of the inland production is consumed locally and marketed domestically. The Inland sector of the State contribute around 0.78 lakh metric tonnes of fish annually, which accounts a net value of Rs. 30,000 lakh.

1.2.3.4 ANIMAL HUSBANDRY

The development of the livestock sector has proved to be very important, as it is the major livelihood of over a million households. In Kerala majority of livestock owning farmers are either small and marginal or even landless. Hence Related animal husbandry is also an important sector

in Kerala and is a mean of alleviating rural poverty and unemployment among women, the marginalized, and the landless. In view of its suitability for combining with crop sub sector and sustainability as a household enterprise with the active involvement of women, it is emerging as a very popular supplementary avocation in the small farms. Feeding, milking, breeding, management, health care and micro-enterprises in livestock provide work for around 32 lakhs of Kerala's 55 lakh households. The state government seeks to promote such activity via educational campaigns and the development of new cattle breeds such as "Sunandini".

In Kerala, nearly 94 per cent of the livestock population is concentrated in rural areas, 80 per cent of the livestock farmers are marginal farmers and agricultural laborers. Women constitute 60 per cent of the workforce in this sector. Most of the cattle holdings are one cow farms. Nearly 65 per cent of the meat required is met from animals of neighboring States.

The last two Census periods witnessed a drastic decline in the livestock and poultry population in the State.

It is assumed that the factors attributed to the decline are scarcity of cheap and quality fodder, rapid increase in the price of feed and feed ingredients, inflow of cheap and low quality livestock products from neighbouring states, indiscriminate slaughter of animals, under exploitation of production potential of animals, non availability of good germplasm and threat from contagious diseases like FMD etc.

As per 2003 figures, Kerala's share in all India cattle population is 1.13 per cent. Buffalo population accounts only for 0.07 per cent, goats 1.01 per cent and pigs 0.54 per cent.

Livestock and Poultry Population in Kerala during last 3 Census (Lakh Nos)

Species	1996	2000	2003
Cattle	33.96	24.91	21.22
Buffalo	3.29	1.10	0.65
Goat	18.61	15.98	12.13
Pig	1.43	0.88	0.76
Poultry	295.25	169.08	131.89
Duck	11.87	10.43	6.61

(Source: <http://livestock.kerala.gov.in>)

The development of the livestock sector has proved to be very important, as it is the major livelihood of over a million households. Kerala Government has established Kerala Livestock Development Board Ltd., in the year 1976, with the aim of evolving a new breed of cattle suitable for the state. The board has been involved in activities like cattle breeding, frozen semen production and distribution, fodder development, training etc.

Requirement and production of Livestock Products in Kerala:

SINo.	Year	Milk (Lakh MT)		Egg (Million Nos.)		Meat ('000 MT)	
		Requirement	Production	Requirement	Production	Requirement	Production
1	2002	23.65	24.20	4217	1347	253	177.74
2	2003	23.87	21.11	4258	1277	256	188.22
3	2004	24.16	20.25	4314	1197	257	195.27
4	2005	24.38	20.63	4341	1196	261	195.37
5	2006	24.53	21.19	4362	1199	262	196.53
6	2007	NA	22.48	NA	1379	NA	205.21

(Source: <http://kepco.nic.in/census.html>)

1.2.3.4.1 Dairy Development

Dairy Development Department was established in Kerala in 1962 with the aim of extending profitable dairy farming in Kerala to increase the milk production and per capita consumption of milk.

The main activities of the department are to educate the farmers providing inputs and technical advice for producing good quality milk and cultivate scientific management practices to reduce the cost of production and increase the profit, organisation and registration of dairy co-operative societies, supervision, inspection, election, arbitration etc related to dairy co-operative societies, Implementing plan schemes related to Dairy sector, ensuring the quality of milk and milk products, enhancing production and consumption of milk products and overall development of agriculture sector. With Dairy department's intervention milk production in Kerala increased from 1.85 LMT in 1962 to 26 LMT in 2009. The per capita availability was increased from 30 gms in 1962 to 213 gms. Milk was surplus in Kerala during the 1998-1999 years and milk is the only food item of which 70% of the total requirement is produced in the state itself. (Source: <http://www.dairy.kerala.gov.in>)

There are total 3512 Dairy co-operatives in Kerala. (Source: <http://www.dairy.kerala.gov.in>)

1.2.3.4.2 Poultry Development

Poultry is emerging as the fastest growing sub sector of agriculture contributing sizeable output to the State economy. The KERALA STATE POULTRY DEVELOPMENT CORPORATION LTD. was established primarily to provide increased momentum and thrust to propel the poultry industry of

the state. The Corporation has been providing impetus for the promotion and development of Poultry Sector in the State of Kerala. Modernizing the poultry in Kerala is the major thrust of the corporate strategy of Kerala State Poultry Development Corporation Ltd.

Year wise Estimate of Egg Production

Sl. No.	Year	Egg Production(million numbers)				% contribution of Kerala
		India	% change over previous year	Kerala	% change over previous year	
1	2003-04	40403	1.46	1277	-5.20	3.2
2	2004-05	45201	1.87	1197	-6.26	2.9
3	2005-06	46166	2.13	1196	-0.08	2.6
4	2006-07	50663	9.74	1199	0.25	2.4
5	2007-08	NA	NA	1379	15.0	NA

(Source: <http://kepco.nic.in/census.html>)

1.2.4 SOIL

In general, the soils of Kerala are acidic, kaolinitic and gravelly with low CEC, low water holding capacity and high phosphate fixing capacity. Climate topography, vegetation and hydrological conditions are the dominant factors of soil formation. On the basis of the morphological features and physico-chemical properties, the soils of the State have been classified into red loam, laterite coastal alluvium, riverine alluvium, Onattukara alluvium, brown hydromorphic, saline hydromorphic, Kuttanad alluvium, black soil and forest loam.

Red loam

Red loams of Kerala are localized in occurrence and are found mostly in the southern parts of Thiruvananthapuram district. These soils occur in catenary sequence along with laterites and are found mainly as deposits by colluviation in foothills and small hillocks. The rapid permeability of the surface soils also has been responsible for the characteristic development of these loamy soils, which are very deep and homogeneous without much expression of horizons. The soils have red colour, which has been attributed to the presence of hematite or anhydrous ferric oxides. These soils are essentially kaolinitic in nature, acidic in reaction, highly porous and friable. They are low in organic matter content as well as in all the essential plant nutrients.

Laterite

Laterite of Kerala is typical kaolinitic weathering products of gneissic and granitic rocks developed under humid tropical conditions. Heavy rainfall and high temperature prevalent in the State are conducive to the process of laterisation. The surface soil, which is reddish brown to yellowish red, is mostly gravelly loam to gravelly clay loam in texture. The profiles have well-developed B-horizon with abundant ferruginous and quartz gravels. The plinthite is characterized by a compact vesicular mass below the B-horizon, composed essentially of a mixture of hydrated oxides of iron and aluminum. The plinthite includes quarriable type that breaks into blocks and also non-quarriable type that breaks into irregular lumps. Laterites are in general poor in available nitrogen, phosphorus and potassium and are low in the bases. They have poor water-holding capacity, CEC and high P fixing capacity with low organic matter content. They are generally acidic with pH ranging from 4.5 to 6.2.

They cover about 65 per cent of the total area of the State, occupying a major portion of the midland and mid-upland regions and are the most extensive of the soil groups found in Kerala.

Coastal alluvium

These soils are seen in the coastal tracts along the West as a narrow belt with an average width of about 10 km and have been developed from recent marine deposits. They show incipient development. The texture is dominated by sand fraction with very rapid permeability. The A horizon is usually thin and the surface textures observed are loamy sand and sandy loam. These soils are acidic and of low fertility level. They are also low in organic matter, clay and CEC.

Riverine Alluvium

These soils occur mostly along the banks of rivers and their tributaries. They show wide variation in their physico-chemical properties depending obviously on the nature of alluvium that is deposited and the characteristics of the catchment area through which the river flows. Horizon differentiation is not well expressed. They are very deep soils which surface texture ranging from

sandy loam to clay loam. They are moderately supplied with organic matter, nitrogen and potassium. They are acidic and poor in phosphorus and lime.

Onattukara alluvium

These soils are confined to the Onattukara region comprising the Karunagapally, Karthikapally and Mavelikara taluks of Kollam and Alappuzha districts. They occur as marine deposits extending to the interior up to the lateritic belt. The soils are, in general, coarse textured with immature profiles. In low-lying areas, the water table is high and drainage is a problem. These soils have very rapid permeability. They are acidic in reaction and are extremely deficient in all the major plant nutrients.

Brown hydromorphic

Hydromorphic soils, as a group, occur extensively in the State. These soils are mostly confined to valley bottoms of undulating topography in the midland and to low lying areas of coastal strip. They have been formed as a result of transportation and sedimentation of material from adjacent hill slopes and also through deposition by rivers. They exhibit wide variation in physico-chemical properties and morphological features. The development of the soil profiles has occurred under impeded drainage conditions. These soils, therefore, exhibit characteristic hydromorphic features like grey horizons, mottling streaks, hard pans, organic matter depositions, iron and manganese concretion, etc. Drainage is the major problem. They are moderately supplied with organic matter, nitrogen and potassium and are deficient in lime and phosphorus. Acidity is a problem in some areas.

Saline hydromorphic

These soils are usually seen within the coastal tracts of the districts of Ernakulam, Alappuzha, Trissur and Kannur. The origin, genesis and development of these soils have been under peculiar physiographic conditions. They are, therefore, not comparable with the saline soils occurring in the other parts of the country. The network of backwaters and estuaries bordering the coast serves as an inlet of tidal waters to flow into these areas, causing salinity. Wide fluctuation in the

intensity of salinity has been observed. During the rainy season, the fields are flooded and most of the salt is leached out, leaving the area almost free of the salts. Electrical conductivity of the soil during this season ranges from 0.1 to 2.0 mmhos/cm². The maximum accumulation of toxic salts is observed during the summer months from March to April when electrical conductivity rises to the range of 10 to 15 mmhos/cm². These soils are in general brownish, deep and imperfectly drained. The profile show wide variation in texture, as is common in most of the alluvial soils. Being developed in areas with relatively high ground water table, these soils show aquic properties. In some areas, undecomposed organic matter is observed in the lower layers, causing problems of acidity. The Pokkali (Ernakulam district) and kaipad (Kannur district) soils come under this category.

Kuttanad alluvium

The Kuttanad region covering about 875 km² is a unique agricultural area in the world. A good portion of this area lies 1-2 m below MSL and is submerged for major parts of the year. The area is susceptible to seasonal ingress of saline water as a result of tidal inflow from the sea. During the monsoons, the rivers and rivulets pour fresh water into the area. As the North East monsoon recedes, seawater again enters the Vembanad Lake and the whole area becomes saline. Hence, the soils of Kuttanad area are faced with the serious problems of hydrology floods, acidity and salinity. Consequent on the construction of the Thanneermukkam Bund, salinity hazards have been considerably reduced. The soils of Kuttanad form the typical waterlogged soils and are entirely different from normal well-drained soils in their morphological, chemical and physical characteristics. They can be grouped into three categories, the Kayal soils, the Karappadam soils and the Kari soils which are dealt with in the zone of Problem Areas.

Black soils

Black soils are restricted in their occurrence to Chittoor Taluk of Palakkad District. They are found to occur in patches and are considered as extension of the black cotton soils observed in the adjacent Coimbatore district of Tamil Nadu. These soils are dark, low in organic matter, calcareous, neutral to moderately alkaline (PH 7.0 to 8.5) and high in clay content and CEC. Hence they exhibit the characteristic cracking during dry periods. They are usually located in gently

sloping to nearly level lands. The levels of potassium and calcium are moderate and those of nitrogen and phosphorus, low.

In a relatively small area of 1000 ha. in Chittoor block, a highly dispersed soil termed as "Poonthalpadam" soil, is seen. This soil occurs as a slushy layer to a depth of about 0.5m to 1.5m. A bed of limestone is seen beneath the slushy layer. The physical properties like plasticity, cohesion, expansion and shrinkage are similar to those of the regular soils of the Deccan.

Forest loam

Being the products of weathering of crystalline rocks under forest cover, they are restricted in occurrence to the eastern parts of the State. They have immature profiles with shallow soils, followed by gneissic parent material in various stages of weathering. In areas with lesser canopy cover, signs of laterisation have been observed in the profiles. They generally show wide variation in depth and are dark reddish brown to black, with loam to silty loam texture. In denuded areas, leaching and deposition of humus in the lower layers are observed. The B-horizon usually contains gneissic gravels and boulders. These soils are generally acidic with PH ranging from 5.5 to 6.3. They are rich in nitrogen; but poor in the bases because of heavy leaching.

1.2.5 IRRIGATION

The uneven distribution of rainfall causes damages to crops by flooding during monsoon and by drought during the summer season. Thus it is seen that Irrigation is a must for the successful cultivation of crops on Kerala. Through there are various methods for providing Irrigation Water, the best and the most reliable method which can be used for Kerala is the construction of storage reservoirs for impounding water during the monsoon and utilizing the water in the reservoir for critical periods of the crops when there is insufficiency.

During 1960's and 70's State faced acute storage of food grains. Hence, major and medium projects were taken up during that time to provide Irrigation facility for paddy. A major portion of the cultivable land could be made as ayacut (The area served by an irrigation project such as a canal, dam or a tank) under these projects. But, in the present context, priority has changed. Almost all projects are being converted into multipurpose projects in order to maximize the utilization of existing resources.

In order to improve the Irrigation potential, innovative Minor Irrigation Schemes have also been implemented in almost all parts of the state in the form of Lift Irrigation Schemes, improvement of existing lakes and ponds, diversion schemes for natural streams, prevention of salinity intrusion in rivers, drainage works to paddy fields, construction of check dams, vented cross bars, sluices. Construction of sea walls, flood damage control works including side protection works of natural streams and channels, etc. are other major areas of activities under the Irrigation Department.

1.3 Scope of the Document

The Scope of this document to describe the complete functional requirements like functionalities, user interface, user characteristics, sitemap, navigation etc. of the proposed SAP related to the state of Kerala. It will also cover non-functional requirements like performance, reliability, availability, security, maintainability, usability etc.

1.4 Objectives of Kerala State Agricultural Portal

The State Agriculture Portal would be the front end for all the services' delivery in Agriculture MMP. A farmer would typically come to SAP to find information / avail any service through CSC / Internet. SAP would be in local language, and have easy to use navigation, search and browse features. SAP would be connected to the State Gateway through firewall and SWAN / Internet and would be accessible to department, SAUs, KVKs for information update and to various service delivery channels like CSCs / State Call Centre, Kisan Call Centres, KB's and internet for public access. The State Agricultural Portal is a conceptual design of service delivery channel at the state level.

1.5 Definitions, Acronyms and Abbreviations

ACMS	Agriculture Content Management System
ADA	Assistant Director of Agriculture
ADO	Agriculture Development Officer
AGMARKNET	Agricultural Marketing Information System Network
AMFU	Agro-Meteorological Forecasting Unit
B2C	Business to Citizen
BAO	Block Agriculture Officer
BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
BPR	Business Process Re-engineering

CAP	Central Agriculture Portal
CFPM	Cross Functional Process Mapping
CFQCTI	Central Fertilizer Quality Control & Training Institute
CIBRC	Central Insecticides Board & Registration Committee
CIL	Central Insecticides Laboratory
CIPMC	Central Integrated Pest Management Centers
CPMU	Central Program Management Unit
CSC	Citizen Service Centre
CTQ	Critical To Quality
DAC	Department of Agriculture and Co-operation
DAHD	Department of Animal Husbandry & Dairying
DAO	District Agriculture Officer
DARE	Department of Agricultural Research & Education
DDA	Deputy Director of Agriculture
DMI	Directorate of Marketing & Inspection
DPPQS	Directorate of Plant Protection, Quarantine & Storage
DPR	Detailed Project Report
EA	Enterprise Architecture
EIS	Enterprise Information Service
ESA	Economic and Statistics Advisor
FCI	Food Corporation of India
FEO	Fisheries Extension Officer
FMC	Futures Market Commission
FRS	Functional Requirement Specifications
G2B	Government to Business
G2C	Government to Citizen
G2G	Government to Government
GAP	Good Agriculture Practice
HTTP	Hyper Text Transfer Protocol
HTTPS	Hyper Text Transfer Protocol Secure
ICAR	Indian Council of Agricultural Research
ICT	Information and Communication Technology
IMD	Indian Meteorological Department
IT	Information Technology
IVRS	Interactive Voice Response Service
JDA	Joint Director of Agriculture
KB	Krishi Bhavan
KCC	Kisan Call Center
KKMS	Kisan Knowledge Management System
KVK	Krishi Vigyan Kendra
LWO	Locust Warning Organization

MANAGE	National Institute of Agriculture Extension & Management
MIS	Management Information System
MIT	Ministry of Information Technology
MMP	Mission Mode Project
MSP	Minimum Support Price
NAFED	National Agricultural Cooperative Marketing Federation of India Ltd
NCDC	National Cooperative Development Corporation
NCF	National Commission of Farmers
NCOF	National Centre for Organic Farming
NCUI	National Cooperative Union of India
NeGP	National e-Governance Plan
NIC	National Informatics Centre
NISG	National Institute for Smart Governance
NSAI	National Seed Association of India
NSC	National Seeds Corporation
PeMT	Project e-Governance Mission Team
PMU	Project Management Unit
POP	Package of Practice
PPP	Public – Private – Partnership
PQS	Plant Quarantine Station
PSU	Public Sector Undertakings
RBM	Result Based Management
RFP	Request for Proposal
RMC	Regulated Market Committees
KB	Krishi Bhawan
SAMB	State Agricultural Marketing Boards
SAP	State Agriculture Portal
SAU	State Agriculture University
SCC	State Call Centre
SDC	State Data Centre
SeMT	State e-Governance Mission Team
SFCI	State Farms Corporation of India
SLA	Service Level Agreement
SMS	Short Message Service
SOA	Service Oriented Architecture
SEC	State Empowered Committee
SRS	Software Requirements Specifications
SSO	Single-Sign-On
SWAN	State Wide Area Network
VLEW	Village Level Extension Worker
XML	Extensible Markup Language

1.6 References

SL NO.	Publisher/Author	Version	Release Date
1.	Detailed Project Report for National Mission Mode Project under National eGovernance Plan		
2.	Discussion with NIC officials of Kerala		
3.	Discussion with State Level officials of Kerala		
4.	Documents shared by state team and NIC team of Kerala		

S. No.	Department	Description	URL / Website Address
1	Agriculture	Department Website	http://www.keralaagriculture.gov.in
2		Website Developed by IIIT	http://kissankerala.net
3		Agriculture University	http://www.kau.edu
4		Market Information	www.amickau.nic.in
5		Agriculture, Technology Management Agency	http://www.atmakottayam.gov.in
6	Marine	Marine product exports	http://www.mpeda.com
7	Fisheries	Department of fisheries, training (Kerala)	http://ifpkochi.nic.in
8		Department of fisheries (all india)	http://www.cifnet.nic.in/
9		Kerala Fisheries Department	http://www.fisheries.kerala.gov.in
10		Green Mussel, Perna viridis, Farming in Kerala	http://eprints.cmfri.org.in
11		Fisheries Network Information System	http://www.fishnetkerala.gov.in
12		College of Fisheries, Panangad	http://www.kau.edu/cofishpanangad.htm
13		Central Institute of Fisheries Technology, Cochin	http://www.icar.org.in/files/ICAR-ITP-2010/cift.pdf
	Fisheries	Fish festival	http://fishnetkerala.gov.in/fishfestival/
14	Dairy	Dairy Development Board	http://www.dairy.kerala.gov.in/
15	Livestock	Livestock Department	http://www.livestock.kerala.gov.in/

S. No.	Department	Description	URL / Website Address
16	Poultry	Poultry	http://kepco.nic.in/index.html
17	Horticulture	Vegetable & Fruit Promotion Council	http://www.vfpck.org
18	Animal Husbandry	Animal Husbandry	http://www.ahdkerala.gov.in/

1.7 Structure of the Document

This document is organized in four parts. **Section 1** is Introduction which mainly describes purpose, scope, objectives, abbreviation and references.

Section 2 describes the general factors that influence the product and its requirements. **Section 2** consists of the following topics.

- As-Is system of Department of Agriculture
- Gaps and issues with current system
- State Agricultural Portal Perspectives
- User Interfaces Partial
- Hardware Interfaces
- Communication Interface
- Architecture of Hardware Infrastructure
- Software for the State Agricultural Portal
- Software Products Used and Its Purpose
- Product Functions

Section 3 will contain all of the software requirements to the level of detail sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements. Section 3 consists of two parts. **Part A** describes about the State Agricultural Portal server and **Part B** describes about the State Agricultural Portal Content Management System.

Section 4 covers mainly the non-functional requirement of the website.

2. OVERALL DESCRIPTION - STATE AGRICULTURAL PORTAL

2.1 As-Is system of Department of Agriculture

The information on all functions and activities of the department of agriculture is provided through the following channels and websites. The merits and de-merits of these sites have been further listed in Annexure 7.4.

2.1.1 Website of Department of Agriculture – <http://www.keralaagriculture.gov.in/>

The screenshot shows the official website of the Department of Agriculture, Kerala. The header includes the logo of the Government of Kerala and the text 'Department of Agriculture Karshika Keralam'. Below the header is a navigation menu with links for Home, Crops, Irrigation, Soils, Package of Practice, Awards, Publications, and Institutions. The main content area displays various news items and announcements, including 'Citizen Chart', 'Tender Notice', 'Department Offices and Address', 'Pricelist', 'Right to information', 'Harithadhalam', 'Kerala Karshakan', 'Application for Debt Relief', 'Government Orders', 'LICENSES ISSUED', 'WORKING INSTRUCTIONS', 'REGISTRATION FORM FOR FARMERS', and 'APPLICATION FORM FOR SMALL & MARGINAL FARMER'S PENSION'. A sidebar on the right lists categories like 'What's new', 'Office News', 'Soil Conservation Department', 'Farm Information Bureau', 'Kerala at a Glance', 'Model Bankable Agricultural Projects', 'Agriculture Related Sites', 'Beneficiary List under NBMP 2002-10', 'Plan Schemes 2011-12', 'Organizational set up', 'Application form for Small and Marginal Farmer's Pension', and 'Archives'. The footer contains copyright information and site details.

This website is the official website of the department of agriculture. This website provides the following information

1. Language Selection (Malayalam/English(default))
2. About US
3. Citizen Charter
4. Tender Notices
5. Office & Officials contact details
6. Crop related Services
 - a. Crops cultivated
 - b. New varieties of crop
 - c. Fertilizer recommendation for crops
7. Irrigation
 - a. Critical growth stages and water
 - b. Irrigation technology bits
 - c. Irrigation projects in Kerala
 - d. Pumpsets
 - e. Selection of pumpsets
8. Soils
 - a. District wise soil types
 - b. Topographical classification

- c. Soil conservation
 - d. Soil testing lab in Kerala
 - e. Geological formations
9. Package of practices
 10. Right to Information
 11. Publications
 12. Institutions details
 13. Schemes
 14. List of all external links related to agriculture
 15. Farmers Registration Form
 16. Government Orders
 17. Market Price list of fruits and vegetables

Issues

1. The website does not provide all the information required by the concerned stakeholders
2. The website does not provide all the services as single window system.
3. There is no content management system to update latest information timely.
4. There is no grievance redressal section.
5. The site is not CSS, W3C complaint.

2.1.2 Website of Karshaka Information Systems Services and Networking (KISSAN) – <http://www.kissankerala.net/home.jsp>

1. **Karshaka Information Systems Services And Networking (KISSAN)** is an integrated, multi-modal delivery of agricultural information system, which provides several dynamic and useful information and advisory services for the farming community across Kerala. It is one of the leading citizen centric e-governance projects of the **Department of Agriculture, Govt. of Kerala**. The project was conceived, developed and managed by the Indian

Institute of Information Technology and Management- Kerala for the Department of Agriculture, Govt. of Kerala. SMS Registration (for crop-wise and market-wise)

2. Application forms for few services
3. Schemes
4. Research
5. Soil & Water
6. Discussion Forum
7. Video streams
8. TV programs
9. Advisory (online, tele and SMS)
10. Market information
11. Agri Directory
12. Fertilizer recommendation
13. Soil Health Card
14. Weather Information
15. Publications (print media)
16. Latest news

Issues

1. The website does not provide all the information required by the concerned stakeholders
2. The website is not inclusive of all services like proposed in SAP portal.

2.1.3 Website for Market and LSGD – <http://www.vfpck.org/docs/home.asp>

VEGETABLE AND FRUIT PROMOTION COUNCIL KERALAM
Self Help • Participation • Prosperity

home | contact | online enquiry | malayalam edition | Search go

BROWSE TO VIEW

» **ABOUT US**

- Profile
- Concept
- KHDP- The Parent Body
- Team VFPC
- Achievements

» **PRODUCTION SUPPORT**

- Seeds
- Training
- Credit
- Insurance
- PTD
- Haritha Nagari
- Extension Programmes
- Publications
- Brochures

IN THE SPOT LIGHT

VFPC: Aiming at Overall Development of Fruits and Vegetables Sector

Vegetable and Fruit Promotion Council Kerala (VFPC) is an ISO 9001-2000 certified company registered under section 25 of Indian Companies Act 1956 and has been established aiming to bring about overall development of fruit and vegetable sector in Kerala. Established in 2001 as the successor organization of Kerala Horticulture Development Programme (KHDP), VFPC is a company with majority stake of farmers and has the Government and financial institutions as the other major shareholders. [more](#)

NEWS & EVENTS

Read Krishiyakanam monthly Malayalam publication covering fruit and vegetable sector

Today's Vegetable Price

QUALITY BANANA CHIPS

Vegetable and Fruit Promotion Council Kerala (VFPC) is an ISO 9001-2000 certified company registered under section 25 of Indian Companies Act 1956 and has been established aiming to bring about overall development of fruit and vegetable sector in Kerala.

1. Home
 - a. News
 - b. Quality seeds
 - c. Products from VFPC
2. About Us
3. Production Support
 - a. Seeds
 - b. Training
 - c. Credit
 - d. Insurance
 - e. PTD
 - f. Extension Programmes

- g. Publications
- h. Brochures
- 4. Market Support
 - a. Farmer market
 - b. Sasya
 - c. Exports
 - d. MIC
 - e. Value additions
- 5. Technology
- 6. Today's market

Issues

The following are not related to this site

1. The website provides information related to Seed Certification Agency only
2. It is maintained by Seed Certification Agency with no links to any other department or information
3. The content has not been updated and is not latest

2.1.4 <http://amickau.nic.in>



**NETWORKING OF AGRICULTURAL
MARKET INTELLIGENCE CENTRES**

[Home](#) | [Price behavior](#) | [Price Data](#) | [AGMARKNET](#) | [Contact Details](#)

Market News: A ventur-

- » [Home](#)
- » [Collaborating Institutions](#)
- » [Collaborating Centres](#)
- » [Objectives](#)

Scenario

- » [Export procedure](#)
- » [Infrastructure](#)
- » [Agri. Export Zone](#)
- » [Post Harvest Technology](#)
- » [Grading and Marking Rules](#)
- » [Grades & Standards](#)
- » [Related Links](#)
- » [Downloads](#)

Publications and News

- » [News Letter](#)
- » [News and Events](#)
- » [Photo Gallery](#)

Agricultural Market Intelligence Centres PRINT

"Establishing and Networking of Market Intelligence Centres in India" has been launched by ICAR under NAIP Component I. The project is on consortium mode with Tamil Nadu Agricultural University, Coimbatore as the Consortium Leader, with the Kerala Agricultural University, Vellanikkara, along with 11 SAUs in India as the Cooperating Consortium Partners.



Price Forec

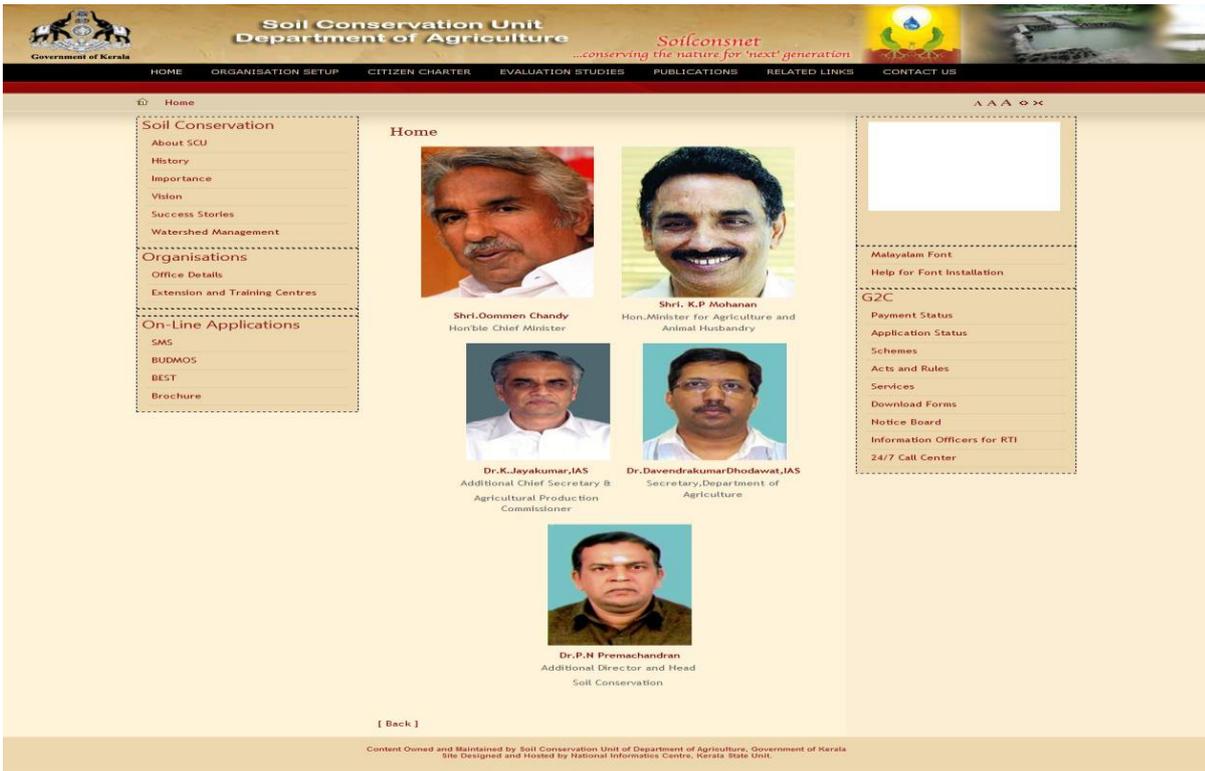
Aim is to

- ▶ Help farmers in realizing higher net price.
- ▶ Provide improved regional linkages in the generation, dissemination and sharing of market information for better decision-making.
- ▶ Provide improved access and use market intelligence with better production and marketing strategies to all stakeholders in the marketing chain.



Visit Photo Gallery For More Pics

2.1.5 www.soilconsnetkerala.gov.in



<http://fibkerala.gov.in/> Farm Information bureau



2.1.6 www.fishcraft.nic.in

2.1.8 http://agmarknet.nic.in

2.1.9 Other websites

- <http://seednet.gov.in/>

- <http://coconutboard.nic.in/>

- <http://www.kau.edu/>



Kerala Agricultural University

കേരള കാർഷിക സർവ്വകലാശാല

Institution	Education	Research	Extension	News & Events	Contact Us
	<ul style="list-style-type: none"> KAU Webmail Downloads Tenders Pension News Announcements Citizens charter Right to Information Academic Forms, Regulations & Syllabi Agro Advisory Services 			<p style="color: red; font-weight: bold;">Admissions 2012</p> <ul style="list-style-type: none"> Regular M.Sc. & Ph D programme MBA in Agribusiness Management 5 year Integrated M.Sc. for +2 students B.Sc (Hon's) Co-operation & Banking for +2 students Ridge Plastering Machine Main Campus PABX Directory Jobs@KAU Trainings@KAU Disciplinary Action 	

KAU P.O. 680 656, Thrissur, Kerala, India. Phone : 91 487 2370432; Fax : 91 487 2370019

Best viewed in IE 5.5 or above,
800x600 screen, scripts enabled
Visitors since 02 Feb. 2001 : 1188 / 56

Search the Web
 Search this Site

Site maintained by the Center for Information Technology, KAU. Your feedback is welcome. Mail to mail<at>kau.edu
See [Disclaimer](#)

- <http://agricoop.nic.in/>



Department of Agriculture & Cooperation

Ministry of Agriculture
Government of India

About Us	RTI Act	Acts & Rules	Citizen Charter(Eng / Hin)	Vigilance	R F D	Sevottam	Schemes	FAQs	Feedback	Hindi
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- Public Grievances
- Circulars & Notifications
- Programmes & Schemes
- Agricultural Statistics
- Weather Watch
- Documents UPDATED
- Tenders UPDATED
- Citizen's Forum
- Drought Management UPDATED
- Doc/Rep... to be Laid on the table of the house
- Email Addresses
- Archives
- Important Links
- Recruitment Notice UPDATED
- Details of AMC/CMCS
- State list
- Agriculture Dept. of State
- Chief Secretaries/Secretaries
- Secy & Commr./Director

Latest Updates

Views of all Stakeholders by 20th March 2012 for finalisation. NEW

- » Agriculture Census 2005-06 & Input Survey 2006-07 results and All India Report on Agriculture Census 2005-06 available on <http://agcensus.nic.in>
- » Felicitation of 101 Farmers at Vigyan Bhawan, New Delhi
- >> Union Agriculture Minister Released Manual for Drought Management



E-Governance Projects



India Portal



Lok Sabha / Rajya Sabha

Conferences/Seminars

- » Presentations - National Conference on Agriculture for Kharif Campaign March, 2012 NEW
- » Core Group of Central Ministers and State Chief Ministers regarding Prices of Essential Commodities held on 08-04-2010
- Presentations -National Conference on Agriculture for Rabi Campaign -14th, 15th September 2011

more »

Reports

- » Report of the High Powered Committee on Cooperatives
- » Report of Workshop to discuss the Mechanism for continuous and Integrated Drought Management

more »

- » Agriculture Contingency Plan NEW

This website belongs to Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India

Website Last Updated on 27th April, 2012

■ <http://cibrc.nic.in/>

Central Insecticides Board & Registration Committee
 Directorate of Plant Protection, Quarantine & Storage
 Department of Agriculture & Cooperation

News & Updates | Parliament | NIC | DAC

Plant Protection Informatics Network | Agricultural growth and safety

About Us
 Insecticides Act, 1968
 Insecticides Rules, 1971
 Forms
 Registration Procedure
 Insecticides in Schedule
 Guidelines
 E-Mail Addresses

To facilitate the registration of safe, efficacious and quality pesticides for domestic use and export.

To disseminate information to State Governments and other concerned departments/agencies for effective implementation of Insecticides Acts and Rules framed there under.

Online Registration
 Application status
 Registered Products
 Major Uses of Pesticides
 Insecticides Banned
 Related Links
 Product Directory

and above with display settings as 800 x 600 pixels and small fonts
[\[About Us \]](#) | [\[Insecticides Act, 1968 \]](#) | [\[Insecticides Rules, 1971 \]](#) | [\[Forms \]](#) | [\[Registration Procedure \]](#)
[\[Insecticides in Schedule \]](#) | [\[Insecticides Banned \]](#) | [\[Registered Products \]](#) | [\[Guidelines \]](#) | [\[Related Links \]](#)
[\[Addresses \]](#) | [\[Product Directory \]](#) | [\[Cropwise Directory \]](#) | [\[Related Statistics \]](#)

Thursday, May 10, 2012

Suggestions are solicited at [e](mailto:cibsecy@hub.nic.in)
cibsecy@hub.nic.in

Content provided and maintained by
 Central Insecticides Board & Registration Committee
 Ministry of Agriculture

Designed and Developed by
 Agricultural Informatics Division
 National Informatics Centre

■ <http://dacnet.nic.in/>

DACNET
 AN EGOV4D INFRASTRUCTURE (AN APPROPRIATE ECONOMIC STRUCTURE)
 FOR GLOBALIZING INDIAN AGRICULTURE.
 INTRADAC -G2E e-Governance model for Department of Agriculture & Cooperation

Vision | Directorate Portals | INTRADAC | Workshop | Related Links | Xth Plan | DACNET News | Brochures | Accolades | Govt. Tenders |

Towards A Second Green Revolution
 Project Details
 Office Search
 Opinion Poll
 Speech
 Market Prices
 VSAT Usage
 Brochures
 Tender / Notice
 FAQs
 DACNET Team
 Completion Certificates
 Weather Watch Report
 Plant Quarantine Report
 e-Citizen
 Press Monitor

IN THE SERVICE TO THE FARMERS OF THE NATION.
 USING THE ICT FOR VOICING THE VOICELESS.

transforming enhancing...the delivery of DAC programs

Developed by Agricultural Informatics Division
 National Informatics Centre
 Department of Information Technology
 Ministry of Information and Communication Technology
 Government of India

Website Updated on 12 March, 2012
 For further details contact : DACNET National Project Coordinator

visitor No. 1442051
 Version 3.0

Disclaimer: The content of these websites are owned by the respective organizations and they may be contacted for any further information or suggestion.

Site Search:

 Submit

- <http://www.atmakottayam.gov.in>



- <http://ifpkochi.nic.in> – Department of Fisheries, Training



■ <http://www.cifnet.nic.in> – Department of Fisheries

■ <http://www.fisheries.kerala.gov.in> – Department of fisheries

- <http://www.mpeda.com> – Marine products exports

MPEDA Export Performance / E U Approved Plants / MPEDA Schemes / Photo Gallery

- <http://www.dairy.kerala.gov.in/> - Dairy development board

DF/Circulars/training_news.pdf

- <http://www.livestock.kerala.gov.in/> - Livestock

www.livestock.kerala.gov.in

KERALA LIVESTOCK DEVELOPMENT BOARD (KLDB)
(A Govt of Kerala undertaking)



Home | Key Contact | Government Orders | News | Tenders | E-mail | Recruitment

search...

Main Menu

- About Us
- Home
- Livestock Scenario
- Policies & Programmes
- Infrastructure
- Training
- Marketing
- Reports & Publications
- Sire Directory
- Mattupetty Farm Fresh Traceable Meat
- Achievements
- Projects
- Incoming Projects
- Login
- Photo Gallery
- Events Gallery
- E-mail

Livestock Development Board



The Kerala Livestock Development Board Ltd. was established in the year 1976. The development of the livestock sector has proved to be very important, as it is the major livelihood of over a million households. Established with the sole aim of evolving a new breed of cattle suitable for the state, the KLDB has now come a long way bringing in new technology and prosperity to this sector. The several bull stations, semen banks, breeding centers for pigs, goat and cattle, progeny testing units, training centers and a number of other centers show the progress that it has made in its three decades of existence.

[read more...](#)

Impressions



Newsflash

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■ <http://kepco.nic.in/index.html> - Poultry development board

KERALA STATE POULTRY DEVELOPMENT CORPORATION

CHIEF MINISTER OF KERALA SHRI V.S.ACHUTHANANDAN ON 20th MAY 2010

A Govt. of Kerala Undertaking, Reg. Office: TC 30/697, Pettah, Thiruvananthapuram-695 024
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Message from Minister for Food, Civil Supplies & Animal Husbandry

- About Us
- Schemes
- Infrastructure
- Integration Farms
- Poultry Breeds
- Poultry Diseases
- Poultry Census
- Future Plans
- More Info
- Contact Us

The KERALA STATE POULTRY DEVELOPMENT CORPORATION LTD. was registered in 1989 as a fully owned Govt. of Kerala undertaking, primarily to provide increased momentum and thrust to propel the poultry industry of the state. The Corporation has been providing impetus for the promotion and development of Poultry Sector in the State of Kerala. Modernizing the poultry in Kerala is the major thrust of the corporate strategy of Kerala State Poultry Development Corporation Ltd. Poultry is emerging as the fastest growing sub sector of agriculture contributing sizeable output to the State economy.



Gramapriya
: An egg producer for free-range farming



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Web Site Designed, Developed by [NIC, Kendriya Bhavan, Kochi](#)
Hosted by [National Informatics Centre](#). Content owned, maintained and updated by KEPCO (Min. of Civil Supplies & Animal Husbandry, Govt. of Kerala undertaking). All queries/comments regarding the content on this site may be sent to [kspdc\(a\)yahoo.co.in](mailto:kspdc(a)yahoo.co.in) (a) stands for @

■ <http://www.ahdkerala.gov.in/> - Animal Husbandry

The screenshot shows the Kerala State Animal Husbandry Department website. The header includes the state emblem and text in Malayalam: "KERALA STATE Animal Husbandry Department" and "കേരള സംസ്ഥാന മൃഗസംരക്ഷണ വകുപ്പ്". Below the header is a navigation bar with links: HOME · RIGHT TO INFORMATION · TENDERS · SCHEMES · QUERIES · WHERE TO GET · BENEFICIARY DETAILS · TRACE YOUR VET · CONTACT US ·. The main content area is divided into three columns. The left column has a "Main Menu" with links for Overview, Administration, Photo Gallery, Site Map, and Login. The middle column has a "News....." section with headlines: "Transfer and posting of VS released", "Online booking of farm produce(Chicks/Eggs) commenced", and "Citizen Charter". The right column has a "Help Desk" section with links for Orders and Circulars, Directory, Reference Labs, Diseases, Statistics, and Online Booking. At the bottom, there is a footer with contact information and a phone number "099135".

2.2 Gaps and Issues with current System

- No single point for complete information
- Stakeholders have to access multiple websites for information relevant to different sections
- More often than not, the knowledge of which website to access is not available
- Issues with information not being updated regularly – thus outdated information being provided which may not be relevant
- The site is not CSS, W3C compliant.
- does not provide all the information required by the concerned stakeholders
- The website is not inclusive of all services like proposed in SAP portal.

2.3 State Agricultural Portal – Perspectives

The Portal would be developed as a Mission Mode Project under the National e-Governance Plan of the Government. The objective behind the Portal is to provide a single window access to the information and services being provided by the Department of Agriculture and all other departments for the citizens and stakeholders. An attempt has been made through this Portal to provide comprehensive, accurate, reliable and one stop source of information about agriculture and its various facets. Links to other websites and sources of information too will be provided.

The content in this Portal will be a collaborative effort of various Indian Government Ministries and Departments, at the Central/State/District level.

The scheme orientation that has traditionally been the mechanism for addressing the needs of the farmers has been changed in light of achieving the overall objectives of the project by providing a service orientation to them. This essentially means that the government under the Agriculture Mission Mode Project would provide services in addition to the existing schemes and programmes of the central and state governments, which would be integrated in nature. This also implies that in the proposed scenario no matter if the services originate from the central or the state government, they would be provided through a single delivery interface to the farmer.

The key recommendations for the services, in the proposed project provide the accessibility to the following information and sub services to the farmers:

- Providing information on crops
- Providing information on Fishery Inputs
- Providing information on Livestock
- Providing information on pesticides
- Providing information on fertilizers
- Providing information on seeds
- Providing information on soil health
- Providing information on crop diseases
- Providing information on forecasted weather
- Providing market information on prices & arrivals of agricultural commodities
- Providing related market information to facilitate farmers get better prices
- Providing interaction platform for producers, buyers & transport service providers
- Providing information on Minimum Support Price & Govt. Procurement Points
- Providing electronic certification for imports & exports
- Providing information on marketing infrastructure & post-harvest facilities
- Providing information on storage infrastructure
- Monitor implementation of schemes / programs
- Providing training support to farm schools for adoption of GAPs

- Sharing Good Agricultural Practices with farmers & trainers and providing extension support through online video
- Providing information on Irrigation Infrastructure
- Providing information on Farm Machinery
- Providing information on Harvesting
- Providing information on Import / Export
- Providing information on Organic Farming
- Providing information on Fodder
- Providing information on Horticulture
- Providing information on Floriculture
- Providing information on Government Policies and Initiatives
- Providing Drought Relief Information
- Providing latest News
- Providing Interactive Platform for Farmers
- Providing information specific to season/month for crops in that season/month state-wise

The Portal will also contain the following components:

- Grievance Management
- Expert Advisory System

2.4 Grievances Redressal Management and Expert Advisory System

2.4.1 As-Is Process

The current system for Grievance Management is manual. The process is as described below

- Farmer registers grievance with officer at Krishi Bhawan(KB)
- If the grievance can be addressed at KB level, the officer provides the solution/information to the farmer
- In case the KB officer is not able to handle the grievance, letter or application is sent to Block ADA
- In case the Block ADA is not able to handle the grievance, application is forwarded to District DDA or JDA who resolve the issue or further forward the application to Department of Agriculture in Thiruvananthapuram
- KB Officer is informed of the resolution from the Block/District office or Department of Agriculture. KB officer informs the farmer.
- In some cases, farmer needs to travel to the Block / District office for resolution

The current system for Expert Advisory is manual. The process is as described below

- Farmer registers for expert advice with officer at KB
- If the KB officer can help the farmer, the officer provides the solution/information to the farmer
- In case the KB officer is not able to handle the information need, letter or application is sent to Block ADA
- In case the Block ADA is not able to handle the information need, application is forwarded to District DDA who resolve the issue or further forward the application to Directorate of Agriculture
- KB Officer is informed of the information from the Block/District office or Department of Agriculture. KB officer informs the farmer.
- In some cases, farmer needs to travel to the Block / District office for advice.

Alternatively, the farmer can call the Kisan Call Center. The steps are as described below.

- Farmer calls at the Call Center
- Agent registers need for advice
- Agent refers the Knowledge Management System
- Agent offers advice

Issues with Current System

- Process is manual
- KB officer is single point of contact.
- If issue not resolved at KB level, then
 - Either, farmer has to wait for information to be provided by Block / District office. This often leads to delay in issue resolution
 - Or, farmer has to travel to different offices. This also leads to delay in issue resolution in addition to the hazards of travelling faced by farmer.

2.4.2 Scope

The following basic components shall be considered in the GRM and EA systems:

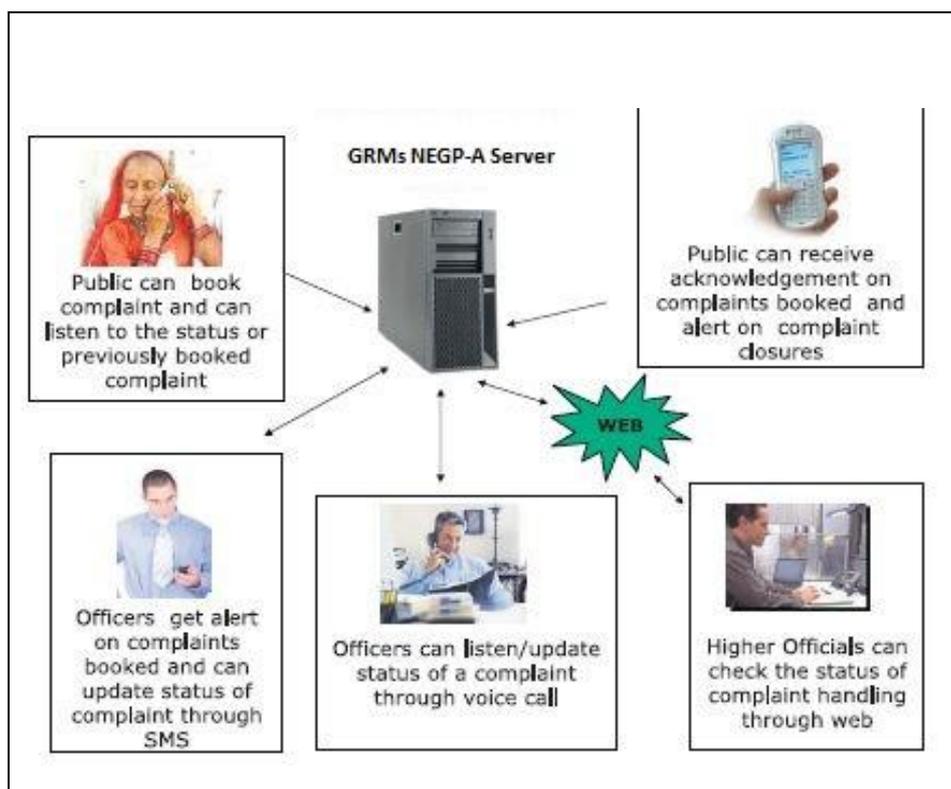
- ✚ Provision for easier and approachable channel for submitting the grievances/queries
- ✚ Multiple Channels for submitting the grievances/queries and for delivering the services
- ✚ Delivery of services in local languages
 - ◆ Consideration of Cross Platform language issues on mobile devices /electronic devices
 - ◆ Provision for the personalized advisory system for season specific , crop specific and location specific

2.4.3 To - Be Solution

Based on above scope the to-be solution for GRM and EA can be envisaged suitable for A-MMPs. Following points will be considered in the development of GRM and EA for NEGP-A.

- The GRM and EA shall be the part of the A-MMPs and interact with all 12 services of A-MMPs, so that an integrated common platform with Open Architecture shall be adopted for GRM, irrespective of any cross platform issue among software modules of services.
- The grievances in GRM and EA are received from grass root level i.e. from the farmer-community across the country. The technological solution should be as simple and handy to use for them.
- Facility has to be provided for submitting the grievance in GRM and EA through multiple channels like web interface / SMS / IVRS system.
- Provision to acknowledge the complainer by issuing complain registration number through SMS/IVRS/WEB Interface.
- The System will support English and a regional language respective for that state.
- Automatic generation of reminder / SMS alert to concern officer, if action has not been taken in specified time.
- Provision for delivery of advices according to State / Region / Crop specific.
- The GRM and EA system shall be automatic as much as possible with less human intervention except for submitting and updating grievances.
- Provision in GRMS and EAS shall be added for broadcasting of any specific / urgent information for Farmers / Stakeholders / Govt.
- Integration of GRMS and EAS with news channels / mass media for dissemination of information of advisory system, if required

2.4.4 Architecture of GRMS –NeGPA

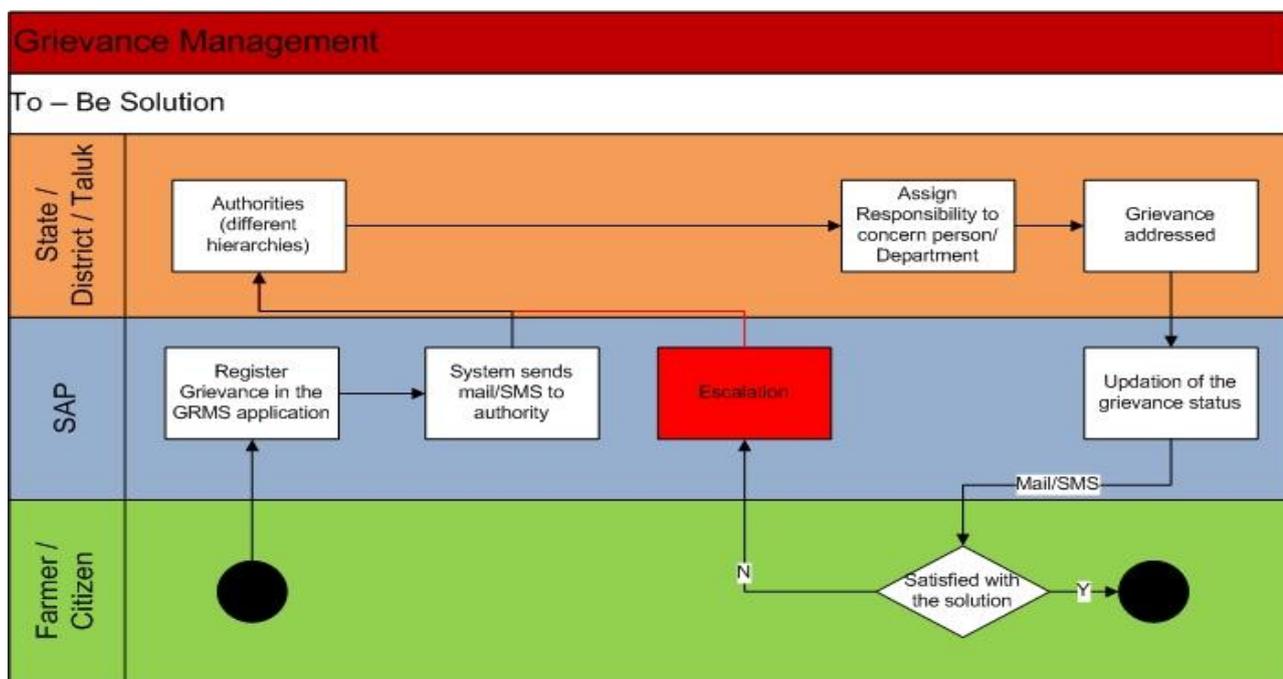


2.4.5 Expected Outcomes

- Easy interface to submit the grievances
- Effective monitoring of grievances
- Immediate dissemination of information to farmer and concerned user

2.4.6 Grievance Redressal Management Process Workflow

The grievance management module would facilitate the farmers/general citizens to raise their grievances related to the selected sub service. The raised grievances would be forwarded to the assigned person to address the grievances.

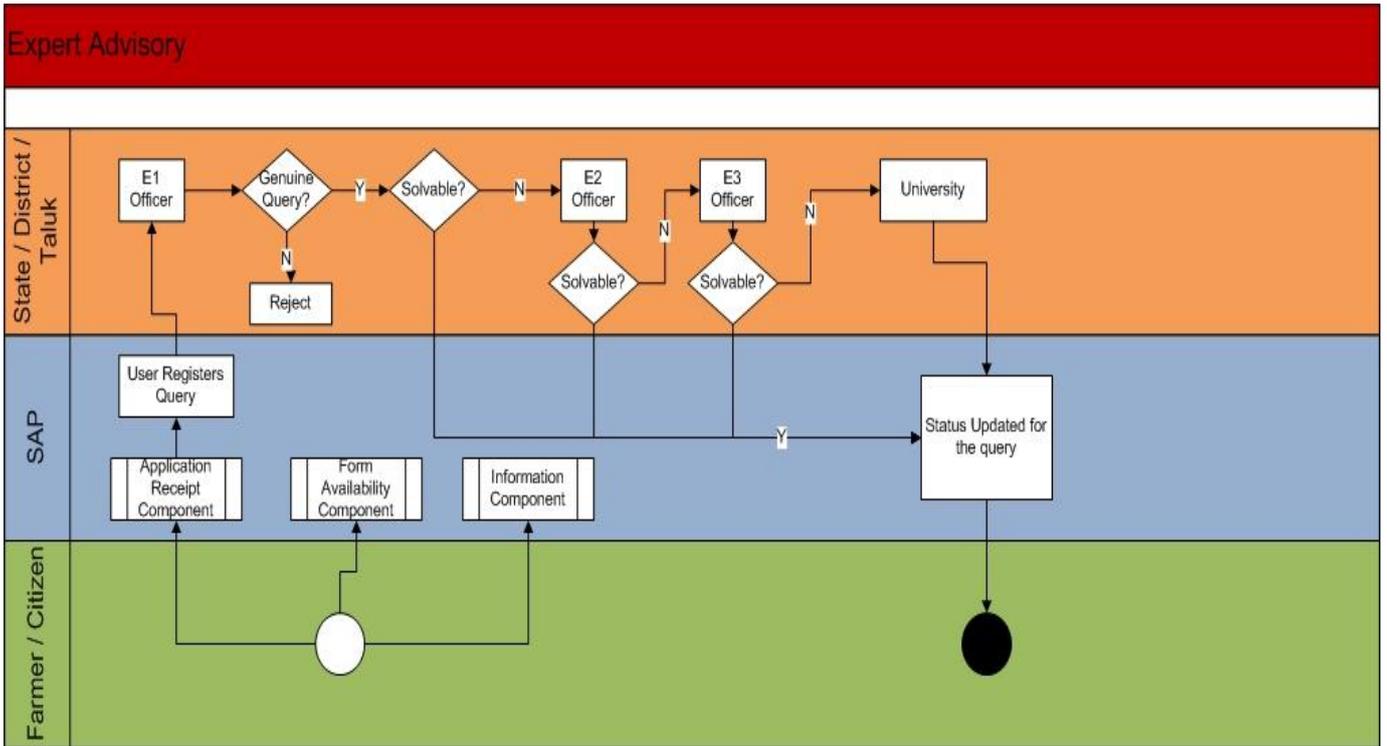


2.4.7 Expert Advisory Workflow

The expert advisory module would facilitate the Subject Matter Experts (SMEs) to provide the advices against the queries received from the farmers and citizens. If the query is not relevant to the SME, it could be forwarded to the concerned SME. In case the SME is not able to give advice within 24 hours of the query submission, it will be automatically forwarded to the next authorized expert for his/her advice and it is usually the research lab / university.

The Modules to be managed are:

1. Adding Query (Through the Frequently Asked Question module)
2. Query Acceptance and Managing Expert Advisory



3.

3. SPECIFIC REQUIREMENTS

3.1 Users of State Agricultural Portal

SI No.	Type of User	Description
1.	Visitors	Common Citizen to SAP
2.		Registered Visitor to CAP
3.	Content Contributors	Farmers <ul style="list-style-type: none"> a. Individual farmers b. Farmer groups c. Farmer cooperatives d. Common Citizen
4.		Central Government <ul style="list-style-type: none"> a. Department of Agriculture & Cooperation b. Attached Offices & Directorates c. Testing Labs d. Academic & Research Institutions
5.		State Government <ul style="list-style-type: none"> a. Department of Agriculture & Cooperation b. Attached Offices & Directorates c. Testing Labs d. Academic & Research Institutions e. Farms and Labs (Input Production Centres) of Agricultural Department

6.		<p>Private Sector</p> <ul style="list-style-type: none"> a. Manufacturers / Wholesalers / Dealers of inputs b. Importers and exporters of agriculture produce c. Traders, Buyers and Commodity Exchanges d. Call Centres e. Agri Business Clinics & Centres
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3.2 User Interfaces

The home page of the State Agricultural Portal will be accessible using a defined URL across the world by any user through Internet.

One should be able to navigate through the State Agricultural Portal of Kerala Home page with or without mouse and keyboard.

It will be supported across different Operating Systems and Browser.

The home page of State Agricultural Portal and all pages and links across it will have beautiful appearance with good images and banners, links with meaningful headings.

3.2.1 User Interface for the Home Page of the State Agricultural Portal

- On the top of home page, there will be a graphic image across the width of home page signifying India's National Emblem making it distinct as government website.
- Different Sections covering Government, Citizen, Departments, Sectors, and Business. All these section will contain a small introduction to the section along with links to subsections within the section.

- The Portal will also contain the following components :
 - Grievance Management
 - Expert Advisory System
- Header Links to Site Map, Add to Favorite, Tell a Friend, Feedback and Contact Us
- Flash display of crops relevant to the season/month or latest pest infestation and precautionary details etc.
- One can search contents from State Agricultural Portal
- Sign in for personalized viewing of State Agricultural Portal. For personalized viewing the visitor will need to register in the State Agricultural Portal
- Spotlight: Latest topic of concern updated every fortnight
- How do I: - For searching information for the services provided by the government, government undertakings and NGOs
- Latest News: - Latest news updates
- Link to maps of different categories like maps of India, Maps of State, District Maps
- Announcements Section: -One can visit to search announcements made for Central and State government departments
- Banner linked to latest subject of concern. It will change frequently as and when required
- Weekly content from State Agricultural Portal: - It will contain important content from the State Agricultural Portal
- Footer Links to About this Portal, Help, Terms of Use, Visitors Summary, Newsletter, Your Opinion, Press Media Coverage and Accessibility Statements
- Introductory Statement to the State Agricultural Portal

3.2.2 Common User Interfaces for all Sections of State Agricultural Portal

For sake of similarity, resemblance and identity across the entire State Agricultural Portal, all pages linked through the Portal Home page to Sections and Sub-Section would have some common features mentioned below.

- All pages will contain same Header Image signifying the page to be part of State Agricultural Portal. Link on this image will lead back to Home page of the State Agricultural Portal
- Header Image signifying Section and Sub-Section of the State Agricultural Portal
- State Agricultural Portal menu containing sections heading and link to sections Citizen, Business, Department, Government, Know State, Sectors, Directories, Forms, Maps, Tenders
- Source information Icon (mouse on event describing the source of content.) Sections or Sub-Section last updated information
- Sub-section Links under the Section
- Footer with links to Home, About the Portal, Site Map, Link to Us, Add to Favorite, Suggest to a Friend, Help, terms of Use, Feedback on each page of the Portal
- Copyright information

3.3 COMMON FEATURES IN ALL THE PAGES OF THE PORTAL

i. User Interface for Sections Government, Citizen, Business and Sectors

Other than the common interface mentioned in previous section, user interface for the Sections would contain all the sub-section with icon image and link, along with small description about the section on the top.

- Section Header Image
- Breadcrumb Just below the Section Header Image
- Iconic Subsection Links
- Small introduction to the section
- More Sub-section link with small banner
- Footer sub-section links as Iconic Sub-section link. Both the links iconic and footer will lead to same page

ii. User Interface for Sub-Sections under Section Government, Citizen, Business, Departments, Know State and Sectors:

Sub-Section under the section in mostly an area, subject or topic of an interest. Sub-Section page would contain in depth information on the topic or link to the page or URL of a website, where you may get the detailed information on the subject or topic or schemes or services.

- Sub-Section Header Image
- Breadcrumb Just below the Sub-section Header Image
- Small introduction to the Sub-section.
- Further Subsection Links
- Sub-section link with small banner
- Related links outside the State Agricultural Portal.
- Footer Sub-section links.

iii. Linking to External Website or Portal

On the State Agricultural Portal, mainly two types of links will be there. Content coming from the State Agricultural Portal repository will be termed as Internal Link and link leading to some URL outside the State Agricultural Portal repository will be termed as External Link. If any link leads to external website or portal, it is proposed to be opened in the new window. The URL should clearly be shown with `outerwin.htm` in the URL box. A message should also be displayed on mouse on event on the exclamation symbol.

External links in the State Agricultural Portal are to be verified once in a week for its availability. In case it is not working, a message is sent to the concerned. In case it is not make operational for next one week or no message is received for alternate URL or no message is received regarding this, the link is removed from the State Agricultural Portal. External links are also added and removed in State Agricultural Portal as per its usability and non-usability.

In subsection of the State Agricultural Portal, External Links are put under heading Related Links.

In case there are no External Links available at any time, the heading Related Links will not be of any use and it will be removed.

Sections with Interactive User Interfaces

Some section of the State Agricultural Portal would be provided with visitor interaction facility either to gather information of user to provide visitor specific facility (Personalized State Agricultural Portal) or to get comment from the visitor for further improvement of the Portal (Speak out your Opinion or Feedback) or to let the visitor seek some specific information (search facility).

3.4 Hardware Interfaces for State Agricultural Portal

This will be decided during the development stage of the project.

3.5 Product Functions

- Providing one stop information as per user's perspectives on various topics like Farmers, Citizen, Business entities, Government Departments, Government Bodies, etc.
- Providing content repository for Forms, Documents, Schemes, Services, Acts, Rules, Websites, Contacts, Announcements, and Search Facility for each type of contents.
- Providing spot light on current topic of mass concern.
- Facility of registering into the State Agricultural Portal for personalized viewing of the Portal.
- Latest news from Government Media News Broadcasting Department.
- How do I? Type of Search facility for various services provided by the State and State Government and PSUs.
- Visitor summary, Newsletter, Your opinion, Press/ Media coverage, About the portal, Site Map, Link to Us, Add to Favorite, Suggest to a friend, Help, Terms of Use, Feedback, Contact Us, Copyright, Best Viewing , Designed and Developed by like regular basic features of web portal.

- Links to Agricultural Based TV and Radio Programmes with schedule.
- Links to Agricultural Based videos in Youtube
(eg. <http://www.youtube.com/user/kisankerala>)

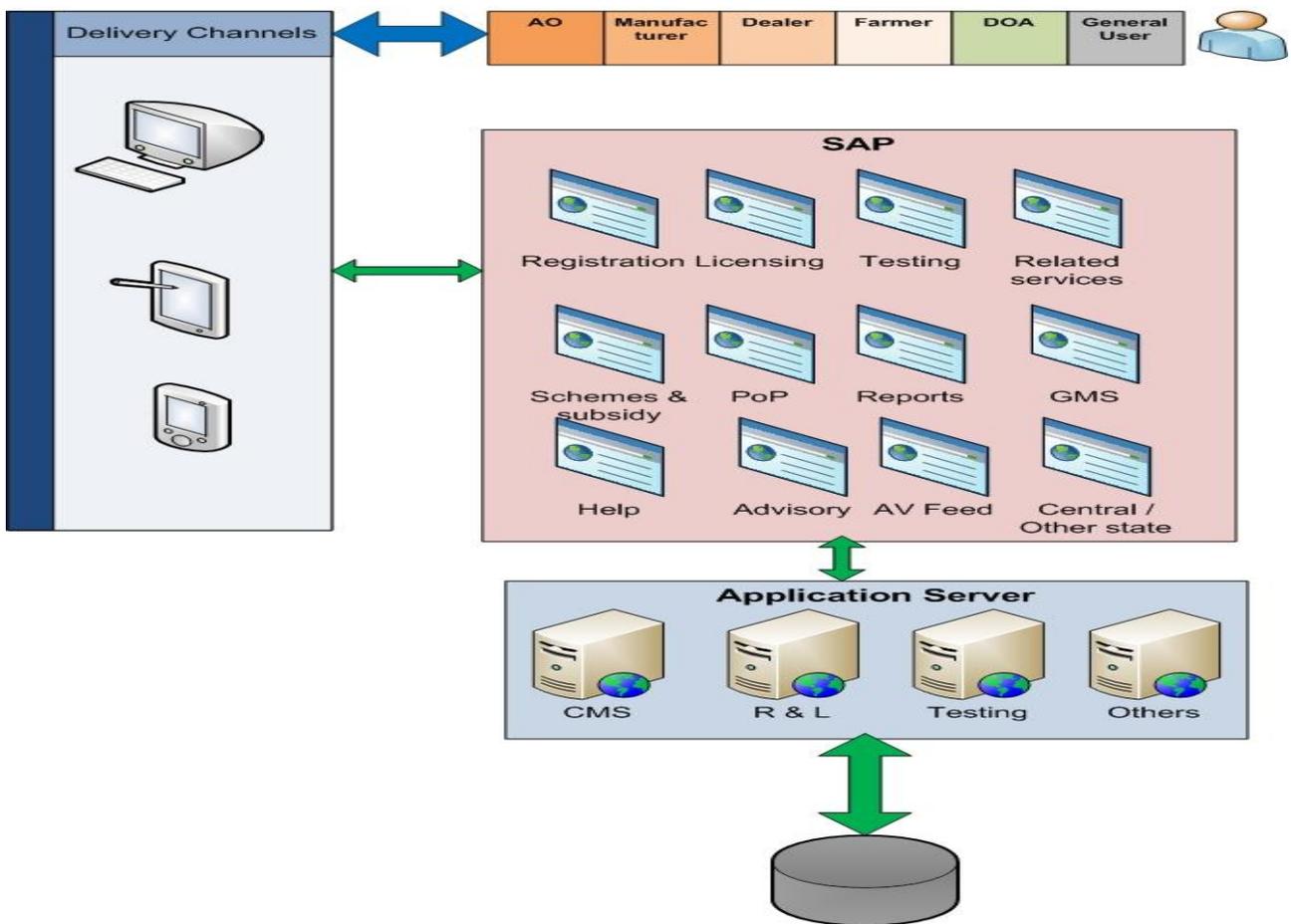
4. SPECIFIC REQUIREMENTS

This chapter has been divided into two parts. **Part-A** explains details of Specific Requirements of State Agricultural Portal of India and **Part-B** explains details of the State Agricultural Portal Content Management Systems.

PART-A

4.1 State Agricultural Portal

The State Agriculture Portal can be accessed by farmers, citizens, Agricultural Officers, Manufacturers, Dealers and officers in Department of Agriculture. It can be accessed using web browser and mobile phones as well. The system is as shown below



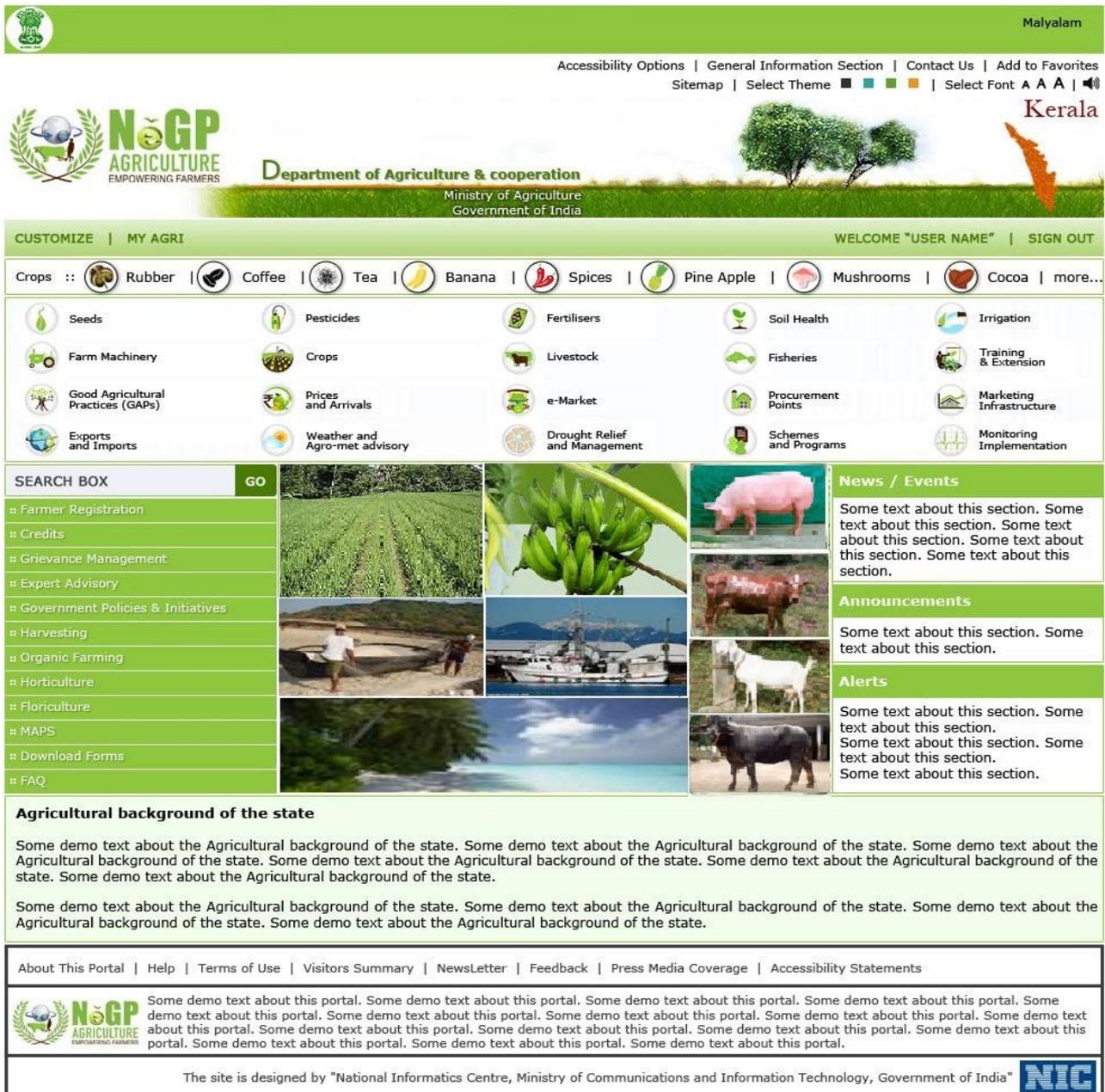
The tentative structure of the State Agricultural Portal will contain the content as mentioned below.

4.2 State Agricultural Portal : Home Page View

The Home page view of State Agriculture View is as shown below. Few screen for services have also been included here.

SAMPLE Layout

(This layout is not the exact form of visual representation of the SAP. It may be changed during the course of design)





Crops :: Rubber | Coffee | Tea | Banana | Spices | Pine Apple | Mushrooms | Cocoa | more...

Seeds	Pesticides	Fertilisers	Soil Health	Irrigation
Farm Machinery	Crops	Livestock	Fisheries	Training & Extension
Good Agricultural Practices (GAPs)	Prices and Arrivals	e-Market	Procurement Points	Marketing Infrastructure
Exports and Imports	Weather and Agro-met advisory	Drought Relief and Management	Schemes and Programs	Monitoring Implementation

Home > Pesticides SEARCH BOX GO

- ## Farmer Registration
- ## Credits
- ## Grievance Management
- ## Expert Advisory
- ## Government Policies & Initiatives
- ## Harvesting
- ## Organic Farming
- ## Horticulture
- ## Floriculture
- ## MAPS
- ## Download Forms
- ## FAQ

Pesticides

- [Dealer Network](#)
- [Pricing And Availability](#)
- [Usage Guidelines](#)
- [Registration / Licensing](#)
- [Pesticide Testing Laboratories](#)
- [Pest Information @ RSK](#)
- [Related Websites](#)

[About This Portal](#) |
 [Help](#) |
 [Terms of Use](#) |
 [Visitors Summary](#) |
 [NewsLetter](#) |
 [Feedback](#) |
 [Press Media Coverage](#) |
 [Accessibility Statements](#)

Some demo text about this portal. Some demo text about this portal.

The site is designed by "National Informatics Centre, Ministry of Communications and Information Technology, Government of India"

Malyalam

[Accessibility Options](#) | [General Information Section](#) | [Contact Us](#) | [Add to Favorites](#)
[Sitemap](#) | [Select Theme](#) ■ ■ ■ ■ | [Select Font](#) **A A A** |

Department of Agriculture & cooperation

Ministry of Agriculture
Government of India

CUSTOMIZE | MY AGRI WELCOME "USER NAME" | SIGN OUT

Crops :: Rubber | Coffee | Tea | Banana | Spices | Pine Apple | Mushrooms | Cocoa | more...

Seeds	Pesticides	Fertilisers	Soil Health	Irrigation
Farm Machinery	Crops	Livestock	Fisheries	Training & Extension
Good Agricultural Practices (GAPs)	Prices and Arrivals	e-Market	Procurement Points	Marketing Infrastructure
Exports and Imports	Weather and Agro-met advisory	Drought Relief and Management	Schemes and Programs	Monitoring Implementation

Home > Seeds

SEARCH BOX

GO

- ## Farmer Registration
- ## Credits
- ## Grievance Management
- ## Expert Advisory
- ## Government Policies & Initiatives
- ## Harvesting
- ## Organic Farming
- ## Horticulture
- ## Floriculture
- ## MAPS
- ## Download Forms
- ## FAQ

Soil Health

- [Soil Testing Software](#)
- [Irrigation Advise](#)
- [Soil Types](#)
- [Soil Testing Labs](#)
- [Diseases and Remedial Measures](#)

[About This Portal](#) | [Help](#) | [Terms of Use](#) | [Visitors Summary](#) | [NewsLetter](#) | [Feedback](#) | [Press Media Coverage](#) | [Accessibility Statements](#)

Some demo text about this portal. Some demo text about this portal.

The site is designed by "National Informatics Centre, Ministry of Communications and Information Technology, Government of India"

4.3 State Agricultural Portal Sections View

Section wise detailed view of each section on the home page of the State Agricultural Portal is as illustrated in Sec 4.2. The various sections are

- Agriculture
 - Seeds
 - Fertilizer
 - Pesticides
 - Soil Health
- Irrigation Infrastructure
- Crops
- Livestock Management
- Fisheries
- Marketing Infrastructure
- Weather and Agro-Met Advisory
- Drought Relief and Management
- Schemes and Programs
- Exports and Imports
- Farmers Registration
- Farm Machinery
- Interaction / Agricultural Scientists
- Harvesting Information
- Organic Farming
- Drought Relief Information
- Fodder Availability
- Good Agricultural Practices
- Expert Advisories
- Grievance Redressal
- Horticulture
- Floriculture
- Govt. Policies
- Downloadable Forms
- FAQ
- MAP
- Accessibility Options
- Sitemap
- RSS
- Select Theme
- Select Font
- About this portal
- Help
- Terms of Use
- Visitor Summary
- News Letter
- Your Opinion
- Press/ Media Coverage
- Accessibility Statement

4.4 State Agricultural Portal Functions

4.4.1 Department of Agriculture

4.4.1.1 Seeds Section

Scope: This activity enables the actor to access the Seed application of Department of Agriculture

Use Case ID:	UC_SAP_001
Use Case Name:	Link to Seed application

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Seed application	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Seeds Section 	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Seed Section application opens	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Seed Section” link on home page of Department of Agriculture 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Seed Section” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor clicks on the “Fertilizer Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Pesticide Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Soil Health Section” link on home page of Department of Agriculture 	<ul style="list-style-type: none"> ▪ Actor is redirected to “Fertilizer Section” application ▪ Actor is redirected to “Pesticides Section” application ▪ Actor is redirected to “Soil Health Section” application
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.1.1 DEALER NETWORK

Scope: This activity enables the actor to view the list of dealers/distributors for seeds

Use Case ID:	UC_SAP_002	
Use Case Name:	Dealers Network	
Actors:	Farmer / Citizen	
Stake Holder:	Citizens / farmers	
Description:	This service aims at providing the actor with list of dealers for seeds	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on Seeds Section → Dealer Network 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	Dealers list to be displayed	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Dealer / Distributor Outlets” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ District ○ Block ○ Product category ○ Dealer Name ○ Office address ○ Phone Number 1 ○ Phone Number 2 ○ E-mail address ○ License Number ○ License Validity
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> • District • Block • Product category 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.1.2 PRICING AND AVAILABILITY

Scope: This activity enables the actor to view the prices and availability status for seeds

Use Case ID:	UC_SAP_003
Use Case Name:	Pricing and Availability

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / Farmers	
Description:	This service aims at providing the actor with prices for seeds	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Seeds Section → Pricing and Availability” 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	Price list for seeds to be displayed	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Pricing and Availability” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ Dealer Name ○ Crop ○ Product category ○ Price / Quantity ○ Stock available ○ District ○ Panchayat / Krishi Bhavan
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> • District • Panchayat / Krishi Bhavan • Product category 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled. 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.1.3 AREA WISE RECOMMENDATIONS

Scope: This activity enables the actor to view area wise recommendations

Use Case ID:	UC_SAP_004
Use Case Name:	Area wise recommendation

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / farmers	
Description:	This service aims at providing the actor with recommendations for the area	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Seeds Section → Area wise recommendation” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	Area wise recommendation page to be displayed to actor	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor accesses the portal and clicks on “Area Wise Recommendation” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ District ○ Block ○ Crops grown ○ Seeds ○ Specified quantity / defined area (Ex - Kg/hectare) ○ Supplier
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> • District • Block • Crops 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.1.4 REGISTRATION / LICENSING FOR SEEDS

Scope: *This activity enables the actor to register as dealer for Seeds and apply for license*

Use Case ID:	UC_SAP_005
Use Case Name:	Registration / License for seeds

Actors:	Dealer	
Stake Holder:	Dealer	
Description:	This service enables the actor to register and apply for licenses	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Seeds Section → Registration / License” 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	Redirected to Registration / Licensing functionality	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Registration/License” 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to the Registration / License Functionality (service 1 SRS)
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id	Use Case for Registration/Licenses in Service 1 SRS	
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.1.5 SEED TESTING LABORATORIES

Scope: *This activity enables the actor to view list of Seed Testing Laboratories*

Use Case ID:	UC_SAP_007
Use Case Name:	List of Seed Testing Laboratories

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service enables the actor to view the list of Seed Testing Labs	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Seeds Section → Seed Testing Laboratories” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	List of Seed Testing Laboratories to be displayed	
Input:	<ul style="list-style-type: none"> ▪ 	

Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Seed Testing Laboratories” 	System Responses <ul style="list-style-type: none"> ▪ List of Seed Testing Laboratories is displayed <ul style="list-style-type: none"> • Lab Name • Address • Contact Person • Contact Number • Equipment details • Testing facilities
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.1.6 SEED CERTIFICATION APPLICATION

Scope: *This activity enables the actor to access the Seed Certification application*

Use Case ID:	UC_SAP_008
Use Case Name:	Seed Certification Application

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / Farmers	
Description:	This service aims at providing the actor with Seed Certification	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Seeds Section → Seed Certification” 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	<ul style="list-style-type: none"> ▪ Actor navigates to Seed Certification Application 	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Seed Certification” 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to the Seed Certification Application
Alternative Flow:	Actor Actions	System Responses

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.1.7 RELATED WEBSITES

Scope: This activity enables the actor to view the links/websites related to Seed section

Use Case ID:	UC_SAP_009
Use Case Name:	Related Websites List

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at providing the actor the list of websites related to Seeds section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → "Seeds Section" → "Related Websites" 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have State Agriculture Portal open in web browser 	
Post conditions:	Related websites should be displayed	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor logs into the portal and selects "Related Website" ▪ Actor clicks on "Seednet Portal" ▪ Actor clicks on "Seed Certification" 	System Responses <ul style="list-style-type: none"> ▪ Related websites list is displayed ▪ http://seednet.gov.in/ opens in new window ▪ http://kssca.kar.nic.in/ opens in a new window
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		

UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.2 Fertilizer Section

Scope: This activity enables the actor to access the Fertilizer application of Department of Agriculture

Use Case ID:	UC_SAP_010
Use Case Name:	Link to Fertilizer application

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Fertilizer application	
Trigger:	▪ Actor clicks on State Agriculture Portal → Fertilizer Section	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Fertilizer Section application opens	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Fertilizer Section” link on home page of Department of Agriculture 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Fertilizer Section” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor clicks on the “Seed Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Pesticide Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Soil Health Section” link on home page of Department of Agriculture 	<ul style="list-style-type: none"> ▪ Actor is redirected to “Seed Section” application ▪ Actor is redirected to “Pesticides Section” application ▪ Actor is redirected to “Soil Health Section” application
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.2.1 DEALER NETWORK

Scope: *This activity enables the actor to view the list of dealers/distributors for fertilizers*

Use Case ID:	UC_SAP_011
Use Case Name:	Dealers List

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / Farmers	
Description:	This service aims at providing the actor with list of dealers for fertilizers	
Trigger:	▪ Actor clicks on "Fertilizers Section → Dealer List"	
Pre conditions:	▪ Actor should have portal window active	
Post conditions:	Dealers list to be displayed	
Input:	▪	
Output:		
Normal Flow:	<ul style="list-style-type: none"> ○ Actor Actions ○ Actor clicks on "Dealer List" ○ ○ ○ ○ ○ ○ 	<ul style="list-style-type: none"> ○ System Responses ○ List with following fields is displayed ○ ○ District ○ Panchayat / Krishi Bhavan ○ Product category ○ Brand Names ○ Dealer Name ○ Office address ○ Phone Number 1 ○ Phone Number 2 ○ License Number ○ License Validity ○ E-mail
Alternative Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> ● District ● Panchayat / Krishi Bhavan ● Product category ● Brand Name 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	

Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.2.2 PRICING AND AVAILABILITY

Scope: *This activity enables the actor to view the prices for fertilizers*

Use Case ID:	UC_SAP_012
Use Case Name:	Fertilizer Price List and stock availability

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / Farmers	
Description:	This service aims at providing the actor with prices for fertilizer	
Trigger:	▪ Actor clicks on “Fertilizers Section → Pricing and Availability”	
Pre-conditions:	▪ Actor should have portal window active	
Post conditions:	Price list for fertilizers to be displayed	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Pricing Information” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ Dealer Name ○ Crops ○ Product category ○ Brand names ○ Price / quantity ○ Available Stock ○ District ○ Block
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> ● District ● Block ● Product category ● Brand name 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	

Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.2.3 USAGE GUIDELINES

Scope: *This activity enables the actor to view area wise recommendations for fertilizers to be used*

Use Case ID:	UC_SAP_013
Use Case Name:	Recommendation for usage of Fertilizers

Actors:	Farmer / Citizen	
Stake Holder:	Citizens / Farmers	
Description:	This service aims at providing the actor with recommendations for the area	
Trigger:	▪ Actor clicks on “Fertilizer Section → Usage Guidelines”	
Pre-conditions:	▪ Actor should have portal window active	
Post conditions:	Area wise recommendation page to be displayed to actor	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor accesses the portal and clicks on “Usage Guidelines” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ District ○ Block ○ Crops grown ○ Fertilizers recommended (stage-wise for crop) ○ Specified quantity / defined area (Ex - Kg/hectare) ○ Supplier
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> ● District ● Block ● Fertilizers ● Stage of crops cycle 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	

Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.2.4 REGISTRATION/LICENSING

Scope: *This activity enables the actor to view register and apply for license to manufacture/distribute fertilizers*

Use Case ID:	UC_SAP_014
Use Case Name:	Registration / License for fertilizers

Actors:	Dealer / Manufacturer	
Stake Holder:	Dealer / Manufacturer	
Description:	This service enables the actor to register and apply for licenses	
Trigger:	▪ Actor clicks on “Fertilizer Section → Registration / License”	
Pre conditions:	▪ Actor should have portal window active	
Post conditions:	Redirected to Registration / Licensing functionality	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Registration/License” 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to the Registration / License Functionality (service 1 SRS)
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id	Use Case for Registration/Licenses in Service 1 SRS	
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.2.5 FERTILIZER TESTING LABORATORIES

Scope: This activity enables the actor to view list of Fertilizer Testing Laboratories

Use Case ID:	UC_SAP_015
Use Case Name:	List of Fertilizer Testing Laboratories

Actors:	Farmer / Dealer	
Stake Holder:	Farmer / Dealer	
Description:	This service enables the actor to view list of fertilizer testing labs	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Fertilizer Section → Fertilizer Testing Laboratories” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	<ul style="list-style-type: none"> ▪ List of Seed Testing Laboratories to be displayed 	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Fertilizer Testing Laboratories” 	System Responses <ul style="list-style-type: none"> ▪ List of Fertilizer Testing Laboratories is displayed <ul style="list-style-type: none"> • Lab Name • Address • Contact Person • Contact Number • Equipments available • Testing facilities available
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.2.6 FMS APPLICATION

Scope: This activity enables the actor to access the FMS application

Use Case ID:	UC_SAP_016
Use Case Name:	FMS Application

Actors:	Farmer / Dealer / Officials at Department of Agriculture
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Stake Holder:	Farmer / Dealer	
Description:	This service aims at providing the actor access to FMS application	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Fertilizer Section” → “FMS Application” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have State Agriculture Portal open in web browser 	
Post conditions:	<ul style="list-style-type: none"> ▪ Actors authorized to access FMS application should be able to access it 	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “FMS Application” 	System Responses <ul style="list-style-type: none"> ▪ FMS Application opens in new window (web application being developed by NIC – link not available)
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.2.7 RELATED WEBSITES

Scope: *This activity enables the actor to view the links/websites related to Fertilizer section*

Use Case ID:	UC_ SAP_ 017
Use Case Name:	Related Websites List

Actors:	Farmer / Citizen
Stake Holder:	Farmer / Citizen
Description:	This service aims at providing the actor the list of websites related to Fertilizer section
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Fertilizer Section” → “Related Websites”
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have State Agriculture Portal open in web
Post conditions:	Related websites should be displayed
Input:	<ul style="list-style-type: none"> ▪
Output:	

Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor logs into the portal and selects “Related Website” ▪ Actor clicks on “FMS Application” ▪ Actor clicks on “Fertilizer Control Order” 	System Responses <ul style="list-style-type: none"> ▪ Related websites list is displayed ▪ FMS Application opens in new window (web application being developed by NIC – link not available) ▪ http://www.agricoop.nic.in/sublegi/FertilizerControlOrder.htm opens in a new window
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3 Pesticides Section

Scope: This activity enables the actor to access the Pesticides application of Department of Agriculture

Use Case ID:	UC_SAP_018
Use Case Name:	Link to Pesticides application

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Pesticides application	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Pesticides Section 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Pesticides Section application opens	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Pesticides Section” link on home page of Department of Agriculture 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Pesticides Section” application

Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor clicks on the “Seed Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Fertilizer Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Soil Health Section” link on home page of Department of Agriculture 	<ul style="list-style-type: none"> ▪ Actor is redirected to “Seed Section” application ▪ Actor is redirected to “Fertilizer Section” application ▪ Actor is redirected to “Soil Health Section” application
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3.1 DEALER NETWORK

Scope: *This activity enables the actor to view the list of dealers/distributors for pesticides*

Use Case ID:	UC_SAP_019
Use Case Name:	Dealers List

Actors:	Farmer / Citizen
Stake Holder:	Citizens / Farmers
Description:	This service aims at providing the actor with list of dealers for pesticides
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Pesticides Section → Dealer List”
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active
Post conditions:	Dealers list to be displayed
Input:	▪
Output:	

Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Dealer List” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ District ○ Block ○ Product category ○ Brand Names ○ Dealer Name ○ Office address ○ Phone Number 1 ○ Phone Number 2 ○ License Number ○ License Validity ○ E-mail
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> • District • Block • Product category • Brand Name 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3.2 PRICING AND AVAILABILITY

Scope: This activity enables the actor to view the prices for pesticides

Use Case ID:	UC_SAP_020
Use Case Name:	Price List

Actors:	Farmer / Citizen
Stake Holder:	Citizens / Farmers
Description:	This service aims at providing the actor with prices for pesticides
Trigger:	▪ Actor clicks on “Pesticides Section → Pricing and Availability”
Pre conditions:	▪ Actor should have portal window active
Post conditions:	Price list for pesticides to be displayed

Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Pricing Information” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ Dealer Name ○ Crops ○ Product category ○ Brand names ○ Price / quantity ○ Available Stock ○ District ○ Block ○ E-mail
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> ● District ● Block ● Product category ● Brand name 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3.3 USAGE GUIDELINES

Scope: *This activity enables the actor to view area wise recommendations for pesticides to be used*

Use Case ID:	UC_SAP_021
Use Case Name:	Recommendation for usage of Pesticides

Actors:	Farmer / Citizen
Stake Holder:	Citizens / Farmers
Description:	This service aims at providing the actor with recommendations for the area
Trigger:	▪ Actor clicks on “Pesticides Section → Usage Guidelines”
Pre-conditions:	▪ Actor should have portal window active
Post conditions:	Area wise recommendation page to be displayed to actor

Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor accesses the portal and clicks on “Usage Guidelines” 	System Responses <ul style="list-style-type: none"> ▪ List with following fields is displayed <ul style="list-style-type: none"> ○ District ○ Block ○ Crops grown ○ Pesticides recommended (stage wise) ○ Specified quantity / defined area (Ex - Kg/hectare) ○ Supplier
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Filter options to be provided <ul style="list-style-type: none"> • District • Block • Crops • Stage of crop cycle 	System Responses <ul style="list-style-type: none"> ▪ List with same fields is displayed but with filters as selected
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3.4 REGISTRATION / LICENSING

Scope: This activity enables the actor to apply for registration / licensing as dealer / manufacturer for pesticides

Use Case ID:	UC_SAP_022
Use Case Name:	Registration / License for pesticides

Actors:	Dealer
Stake Holder:	Dealer
Description:	This service enables the actor to register and apply for licenses
Trigger:	▪ Actor clicks on “Seeds Section → Registration / License”
Pre conditions:	▪ Actor should have portal window active
Post conditions:	Redirected to Registration / Licensing functionality
Input:	▪

Output:	
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Registration/License” System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to the Registration / License Functionality (service 1 SRS)
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id	Use Case for Registration/Licenses in Service 1 SRS
UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.3.5 PESTICIDE TESTING LABORATORIES

Scope: This activity enables the actor to view list of Pesticide Testing Laboratories

Use Case ID:	UC_SAP_023
Use Case Name:	List of Pesticide Testing Laboratories

Actors:	Farmer / Dealer	
Stake Holder:	Farmer / Dealer	
Description:	This service enables the actor to view list of pesticide testing labs	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Pesticides Section → Pesticides Testing Laboratories” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	<ul style="list-style-type: none"> ▪ List of Pesticide Testing Laboratories to be displayed 	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Pesticides Testing Laboratories” 	System Responses <ul style="list-style-type: none"> ▪ List of Pesticides Testing Laboratories is displayed <ul style="list-style-type: none"> • Lab Name • Address • Contact Person • Contact Name • Equipments • Testing facilities
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.3.6 RELATED WEBSITES

Scope: This activity enables the actor to view the links/websites related to Pesticide section

Use Case ID:	UC_SAP_024
Use Case Name:	Related Websites List

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at providing the actor the list of websites related to Pesticide section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on "Pesticide Section" → "Related Websites" 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have State Agriculture Portal open in web browser 	
Post conditions:	Related websites should be displayed	
Input:	▪	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor logs into the portal and selects "Related Website" ▪ Actor clicks on "Central Insecticide Board" ▪ Actor clicks on "Bureau of Indian Standards" 	System Responses <ul style="list-style-type: none"> ▪ Related websites list is displayed ▪ http://cibrc.nic.in/ opens in new window ▪ http://www.bis.org.in/ opens in new window
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		

UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.4 Soil Health Section

Scope: This activity enables the actor to access the Soil Health application of Department of Agriculture

Use Case ID:	UC_SAP_025
Use Case Name:	Link to Soil Health application

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Soil Health application	
Trigger:	▪ Actor clicks on State Agriculture Portal → Soil Health Section	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Soil Health Section application opens	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Soil Health Section” link on home page of Department of Agriculture 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Soil Health Section” application(linked with kisankerala)
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor clicks on the “Seed Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Pesticide Section” link on home page of Department of Agriculture ▪ Actor clicks on the “Fertilizer Section” link on home page of Department of Agriculture 	<ul style="list-style-type: none"> ▪ Actor is redirected to “Seed Section” application ▪ Actor is redirected to “Pesticides Section” application ▪ Actor is redirected to “Fertilizer Section” application
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.1.4.1 SOIL TESTING SOFTWARE

Scope: *This activity enables the actor to access Soil Testing Software*

Use Case ID:	UC_ SAP_026
Use Case Name:	Soil Testing Software

Actors:	Farmer / Dealer / Officer at Block and District	
Stake Holder:	Officer at Block and District	
Description:	This service enables the actor to access Soil Testing Software	
Trigger:	▪ Actor clicks on "Soil Health Section → Soil Testing Software"	
Pre conditions:	▪ Actor should have portal window active	
Post conditions:	▪ Authorized users should have access to Soil testing software	
Input:	▪	
Output:		
Normal Flow:	Actor Actions ▪ Actor clicks on "Soil Health Software"	System Responses ▪ Actor is redirected to the Soil Testing Software / Application
Alternative Flow:	Actor Actions ▪	System Responses ▪
Exceptional Flow:	Actor Actions ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled	System Responses ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.4.2 IRRIGATION ADVISE

Scope: *This activity enables the actor to access the irrigation advise application*

Use Case ID:	UC_ SAP_027
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Use Case Name:	Irrigation advise based on soil type	
Actors:	Farmer	
Stake Holder:	Farmer	
Description:	This service enables the actor to view irrigation advise	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Soil Health Section → Irrigation Advise” 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active 	
Post conditions:	Irrigation Advise Application to be accessible	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on “Irrigation Advise” 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to Irrigation Advise application
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.1.4.3 SOIL TYPES

Scope: *This activity enables the actor to view information on Soil types*

Use Case ID:	UC_SAP_028
Use Case Name:	Information on Soil Types
Actors:	Farmer / Citizen
Stake Holder:	Farmer / Citizen
Description:	This service enables the actor to view information on soil types
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Soil Health Section → Soil Types”
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have portal window active
Post conditions:	View information on Soil Types
Input:	<ul style="list-style-type: none"> ▪
Output:	

Normal Flow:	Actor Actions ▪ Actor clicks on “Soil Types”	System Responses ▪ Actor is redirected to Soil Types application
Alternative Flow:	Actor Actions ▪	System Responses ▪
Exceptional Flow:	Actor Actions ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled	System Responses ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.4.4 SOIL TESTING LABS

Scope: This activity enables the actor to view list of Seed Testing Laboratories

Use Case ID:	UC_ SAP_029
Use Case Name:	List of Soil Testing Laboratories

Actors:	Farmer / Dealer	
Stake Holder:	Farmer / Dealer	
Description:	This service enables the actor to view Soil Testing Laboratories	
Trigger:	▪ Actor clicks on “Soil Health Section → Soil Testing Laboratories”	
Pre conditions:	▪ Actor should have portal window active	
Post conditions:	List of Soil testing Labs	
Input:	▪	
Output:		
Normal Flow:	Actor Actions ▪ Actor clicks on “Soil Testing Laboratories”	System Responses ▪ List of Soil Testing Laboratories is displayed • Lab Name • Address • Contact Person • Contact Number • E-mail
Alternative Flow:	Actor Actions ▪	System Responses ▪

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.1.5 Diseases and Remedial Measures

Scope: This activity enables the actor to access the application for Diseases and Remedial Measures

Use Case ID:	UC_SAP_030
Use Case Name:	Application for Diseases and Remedial Measures

Actors:	Farmer	
Stake Holder:	Farmer	
Description:	This service aims at taking the actor to the Diseases and Remedial Measures section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Diseases and Remedial measures	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Diseases and Remedial Measures section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the "Diseases and Remedial Measures" link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to "Diseases and Remedial Measures" application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.2 Farmer Registration

Scope: This activity enables the actor to access the Farmer Registration application of Department of Agriculture

Use Case ID:	UC_SAP_031
Use Case Name:	Link to Farmer Registration Application

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Farmer Registration Application	
Trigger:	▪ Actor clicks on State Agriculture Portal → Farmer Registration	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Soil Health Section application opens	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Farmer Registration” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Farmer Registration” application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.2.1 Farmer Registration (<http://www.farmer.gov.in>)

Scope: This activity enables the actor to register as farmer and update the Farmers database

Use Case ID:	UC_SAP_032	
Use Case Name:	Registration of farmer	
Actors:	Farmer	
Stake Holder:	Farmer	
Description:	This service aims at registering the farmer and updating the Farmers Database	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Farmer Registration” link in home page 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Trigger mail sent to the Actor’s mail id and database to be updated with farmer details	
Input:	<p>1.Farmer’s detail</p> <ul style="list-style-type: none"> • Name (First Name, Middle Name, Last Name) • Address (State, District, Block, Village, Pin Code (Link with Post database)) • Phone - Landline • Mobile number • e-mail id • Farmer Type (Agricultural, Livestock, Fisherman) 	
Output:	<ul style="list-style-type: none"> ▪ Details as mentioned to be entered in database (respective tables) 	
Normal Flow:	<ul style="list-style-type: none"> ▪ Actor clicks on the “Farmer Registration” link on home portal ▪ Actor fills the details and clicks on Submit ▪ Actor selects Yes ▪ Actor selects No 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Farmer basic details page is loaded with following fields. This is the minimum required information for farmer registration. <ul style="list-style-type: none"> • Name (First Name, Middle Name, Last Name) • Address (State, District, Block, Village, Pin Code (Link with Post database)) • Phone - Landline • Mobile number • e-mail id • Farmer Type (Agricultural, Livestock, Fisherman) ▪ Actor is provided with option to update “Static Information” with Yes/No options. ▪ Actor is redirected to “Update Static Information” use case ▪ Actor is redirected to home page of portal
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		

UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪

4.4.2.2 Update Static Information for farmer

Scope: This activity enables the actor to register provide the static information required and update the Farmers database

Use Case ID:	UC_SAP_033
Use Case Name:	Update Static information

Actors:	Farmer		
Stake Holder:	Farmer		
Description:	This service aims at updating the Farmers Database		
Trigger:	<ul style="list-style-type: none"> ▪ Actor is redirected from UC_SAP_032 ▪ Actor logs into portal and clicks on “Update Profile” and clicks on “Static Information” 		
Pre-conditions:	Actor should have opened the State Agriculture Portal and logged in with valid user credentials		
Post conditions:	Trigger mail sent to the Actor’s mail id and database to be updated with farmer details		
Input:			
Output:	▪ Details as mentioned to be entered in database (respective tables)		
Normal Flow:	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Logs in to Portal and clicks on “Static Information” <p>This is the information required for Sum Total of Required data elements (LCM) for 360 degree view.</p> </td> <td style="width: 50%; vertical-align: top;"> <p>System Responses</p> <ul style="list-style-type: none"> ▪ Personal details page is loaded with following information fields <ul style="list-style-type: none"> • Father’s name • Mother’s name • Gender • Age (Date of birth) • Marital status • Photo • Identification (Voter id, Ration Card, UID, Driving License, KCC No.,NPR, Fishermen Biometric card etc.) • Personal Identification Mark • Educational Qualification <ul style="list-style-type: none"> ○ Illiterate/Literate ○ Non-Matric, Matric, graduate, post-graduate, Diploma, Other ○ Field ▪ Family details page is loaded with following information fields </td> </tr> </table>	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Logs in to Portal and clicks on “Static Information” <p>This is the information required for Sum Total of Required data elements (LCM) for 360 degree view.</p>	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Personal details page is loaded with following information fields <ul style="list-style-type: none"> • Father’s name • Mother’s name • Gender • Age (Date of birth) • Marital status • Photo • Identification (Voter id, Ration Card, UID, Driving License, KCC No.,NPR, Fishermen Biometric card etc.) • Personal Identification Mark • Educational Qualification <ul style="list-style-type: none"> ○ Illiterate/Literate ○ Non-Matric, Matric, graduate, post-graduate, Diploma, Other ○ Field ▪ Family details page is loaded with following information fields
<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Logs in to Portal and clicks on “Static Information” <p>This is the information required for Sum Total of Required data elements (LCM) for 360 degree view.</p>	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Personal details page is loaded with following information fields <ul style="list-style-type: none"> • Father’s name • Mother’s name • Gender • Age (Date of birth) • Marital status • Photo • Identification (Voter id, Ration Card, UID, Driving License, KCC No.,NPR, Fishermen Biometric card etc.) • Personal Identification Mark • Educational Qualification <ul style="list-style-type: none"> ○ Illiterate/Literate ○ Non-Matric, Matric, graduate, post-graduate, Diploma, Other ○ Field ▪ Family details page is loaded with following information fields 		

	<ul style="list-style-type: none"> ▪ Farmer fills the personal details and clicks on Next. 	<p>Family details</p> <ul style="list-style-type: none"> • No. of family members (Dependent) <ul style="list-style-type: none"> ○ Name(First Name, Middle Name, Last Name), ○ Gender ○ Relationship with farmer ○ Age ○ Educational qualification ○ Employment status, ○ If employed, then income, ○ Photo <p>(based on number of family members, the details for each family member is to be validated) (option to add/edit/delete)</p>
	<ul style="list-style-type: none"> ▪ Farmer fills the personal and family details and clicks on Next 	<ul style="list-style-type: none"> ▪ Farm details page is loaded with following information fields <p>Farm details</p> <ul style="list-style-type: none"> • Land Holding details (Survey No., Rakba, Rin Pustika No., Survey/subdivision number, Sub-Survey No. etc.) (Integration with Land Records) • Farm Size (In Bigha/acres/Hectares/..) (Based on it automatic categorization as Landless Farmer(0 – 3 Bigha / 0 - 0.4 Hectares) , Marginal Farmer (3 – 7.5 Bigha / 0.4 – 1 Hectares), Small Farmer (7.5 – 15 Bighas / 1-2 hectares) , Big Farmer (More than 15 Bighas / More than 2.0 Hectarese) <p>Soil type</p> <ul style="list-style-type: none"> • Land type - Irrigated/Rainfed/Dryland • Irrigation Infrastructure available on farm (Wells, tube wells, drip irrigation, etc.) • Type of Cultivation (Self / Lease / Share) • Man Power for Farming Self / Hired Basis • Type of area • Area under Nursery • Area under vegetable crops • Area under permanent crops • Area under progeny orchard • Planting materials • Tuber crops

		<p>Crop details</p> <ul style="list-style-type: none"> • Crops cycles • Crops grown <p>Livestock details</p> <ul style="list-style-type: none"> • Number of animals owned • Species, Animal, breed, age
	<ul style="list-style-type: none"> ▪ Farmer fills the details and clicks on Next ▪ Farmer fills the details and clicks on Next 	<ul style="list-style-type: none"> ▪ Other details page is loaded with following information fields <p>Equipment details</p> <ul style="list-style-type: none"> • Name of equipment • Number • Make <p>(option to add/edit/delete)</p> <p>Source of agricultural Inputs</p> <ul style="list-style-type: none"> • Name and address of the dealer/agency (Seed, Fertilisers, Pesticides) <p>(option to add/edit/delete)</p> <p>Markets accessed for produce</p> <ul style="list-style-type: none"> • Name of the market and address <p>(option to add/edit/delete)</p> <ul style="list-style-type: none"> ▪ Financial details page is loaded with following information fields <p>Bank details (option to add/edit/delete)</p> <ul style="list-style-type: none"> • Bank name • MICR No • Branch Name and Code • Account Number • Loan as on date • Kisan Credit Card holder (Yes/No) <p>Insurance details (option to add/edit/delete)</p> <ul style="list-style-type: none"> • Name of the agency • Type of insurance • Insured on • Policy no • Date of maturity • Premium • Mode of payment <p>Family Economical Status</p>

	access has been temporarily disabled	not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> Static Information is a one-time activity. However, option to edit details should be provided. Also, wherever applicable, option to add/edit/delete to be provided 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> 	

4.4.2.3 Update Dynamic Information for farmer

Scope: This activity enables the actor to register provide the dynamic information required and update the Farmers database

Use Case ID:	UC_SAP_034
Use Case Name:	Update Dynamic information

Actors:	Farmer	
Stake Holder:	Farmer	
Description:	This service aims at updating the Farmers Database	
Trigger:	<ul style="list-style-type: none"> Actor logs into portal and clicks on "Update Profile" and clicks on "Dynamic Information" 	
Pre-conditions:	Actor should have opened the State Agriculture Portal and logged in with valid user credentials	
Post conditions:	Trigger mail sent to the Actor's mail id and database to be updated with farmer details	
Input:		
Output:	Details as mentioned to be entered in database (respective tables)	
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> Logs in to Portal and clicks on "Update Information" and selects "Dynamic Information" <p>This information has to be updated every season.</p>	<p>System Responses</p> <ul style="list-style-type: none"> The page loads with following information fields Year (to be auto populated) Season (to be auto populated) <p>Inputs</p> <ul style="list-style-type: none"> Crop Sown Area Sown Variety used Seeds used Fertilizers used Pest occurrence and pesticides used Water sources used Labour Machinery used <p>Production, Income, Expenditure, Insurance</p>

		<ul style="list-style-type: none"> ▪ Crop wise production ▪ Crop wise income ▪ Expenditure ▪ Crop Insurance details <ul style="list-style-type: none"> ○ Name of the agency ○ Type of insurance ○ Insured on ○ Policy no ○ Date of maturity ○ Premium ○ Mode of payment <p>Marketing</p> <ul style="list-style-type: none"> ▪ Warehouse facility used ▪ Processing facilities used ▪ Markets <ul style="list-style-type: none"> ▪ Actor is redirected to home page of portal
Alternative Flow:	<p>▪ Actor clicks on Submit</p> <p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor submits only partial information 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ System should allow the actor to do so
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ Dynamic Information is repetitive activity every season. However, option to edit details should be provided. 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.2.4 Mail/SMS sent to farmer to update season information

Scope: This activity enables the actor to register provide the dynamic information required and update the Farmers database

Use Case ID:	UC_SAP_035
Use Case Name:	Reminder mail/SMS to farmer to update Information

Actors:	System	
Stake Holder:	Farmer	
Description:	This service aims at updating the Farmers Database	
Trigger:	<ul style="list-style-type: none"> ▪ Admin from Block/District office chooses to send reminder mail/SMS to farmers ▪ Mail/SMS sent to farmer requesting to update season information based on time set for trigger 	
Pre-conditions:	<ul style="list-style-type: none"> ▪ Season duration specified ▪ Timeframe for updating of information specified ▪ System runs a check before sending mail. The system checks if information has been updated in the Database or not. If not, mail/SMS is sent to those farmers 	
Post conditions:	Trigger mail sent to all farmers who haven't updated the Dynamic Information for the season	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:	Details as mentioned to be entered in database (respective tables)	
Normal Flow:	Actor Actions	System Responses <ul style="list-style-type: none"> ▪ System checks if information is updated ▪ Lists all farmers whose information is yet to be updated ▪ Sends SMS/ mail in pre-decided format requesting farmers to update information ▪ Mail is also sent to concerned Block with list of farmers (Block-wise) intimating failure to update data
Alternative Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.2.5 Registered Farmers List

Scope: This activity enables the actor to view the list of farmers registered

Use Case ID:	UC_SAP_036	
Use Case Name:	Farmers List	
Actors:	Block/ District office admin (KB Officer, Agricultural Officer, Block ADA, DDA, District JDA)	
Stake Holder:	Farmer, Block/ District office admin (KB Officer, Agricultural Officer, Block ADA, DDA, District JDA)	
Description:	This service aims at providing the actor the list of farmers who have registered with the State Agriculture Portal	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on “Farmer Registration” → “Registered Farmers List” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have logged into the portal and should have access to view the list 	
Post conditions:		
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor logs into the portal and selects “Registered Farmers List” ▪ Option to filter the list with following filters <ul style="list-style-type: none"> • District • Panchayat • Block ▪ Actor selects “Static Information” ▪ Actor Selects “Dynamic Information” 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ List is displayed with basic details of farmer ▪ List is displayed with basic details of farmer based on filter options selected by actor ▪ List of farmers with their static information is displayed ▪ List of farmers with their dynamic information is displayed
Alternative Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor Selects “Dynamic Info Status Update” ▪ Actor clicks on “Send Reminder Mail” 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ List of farmers with dynamic information and status is updated ▪ UC_SAP_004 is invoked
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id	UC_SAP_004	
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.2.6 Related Websites

Scope: This activity enables the actor to view the links/websites related to Department of Agriculture

Use Case ID:	UC_SAP_037
Use Case Name:	Related Websites List

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at providing the actor the list of websites related to Department of Agriculture	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → “Related Websites” 	
Pre conditions:	<ul style="list-style-type: none"> ▪ Actor should have access to the State Agriculture Portal 	
Post conditions:	Related websites should be displayed	
Input:	<ul style="list-style-type: none"> ▪ 	
Output:		
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor logs into the portal and selects “Related Website” ▪ Actor clicks on “kissan kerala” ▪ Actor clicks on “VFCK” ▪ Actor clicks on “Coconut Board” <p>** - Likewise list of websites must be displayed. Refer Annexure for list of websites.</p>	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Related websites list is displayed ▪ http://kisankerala.net/ opens in new window ▪ http://vfpck.org/ opens in a new window ▪ http://coconutboard.nic.in/ opens in a new window
Alternative Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ 	<p>System Responses</p> <ul style="list-style-type: none"> ▪
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.3 Farm Machinery

Scope: This activity enables the actor to access the application for Farm Machinery

Use Case ID:	UC_SAP_038
Use Case Name:	Application for Farm Machinery

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to access farm machinery application	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Farm Machinery 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Farm Machinery section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Farm Machinery” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Farm Machinery” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.4 Weather Forecasting

Scope: This activity enables the actor to access the application for Weather Forecasting

Use Case ID:	UC_SAP_039
Use Case Name:	Weather Forecasting Section

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Weather Forecasting Section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Weather Forecasting 	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Weather Forecasting section is loaded	
Input:		

Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Weather Forecasting” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Weather Forecasting” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.5 Harvesting

Scope: This activity enables the actor to access the application for Harvesting

Use Case ID:	UC_SAP_040
Use Case Name:	Application for Harvesting

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Harvesting section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Harvesting 	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Harvesting section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Harvesting” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Harvesting” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		

UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.6 Import / Export

Scope: This activity enables the actor to access the application for Import / Export

Use Case ID:	UC_SAP_041
Use Case Name:	Application for Import / Export

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to Import/Export application section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Import / Export	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Import / Export section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Import / Export” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Import / Export” application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.7 Schemes

Scope: This activity enables the actor to access the application for Schemes

Use Case ID:	UC_SAP_042	
Use Case Name:	Application for Schemes	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to Schemes section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Schemes 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Schemes section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Schemes” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Schemes” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.8 Organic Farming

Scope: This activity enables the actor to access the application for Organic Farming

Use Case ID:	UC_SAP_043	
Use Case Name:	Application for Organic Farming	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Organic Farming section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Organic Farming 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Organic Farming section is loaded	

Input:					
Output:					
Normal Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td> <ul style="list-style-type: none"> Actor clicks on the “Organic Farming” link on home page of SAP </td> <td> <ul style="list-style-type: none"> Actor is redirected to “Organic Farming” application </td> </tr> </table>	Actor Actions	System Responses	<ul style="list-style-type: none"> Actor clicks on the “Organic Farming” link on home page of SAP 	<ul style="list-style-type: none"> Actor is redirected to “Organic Farming” application
Actor Actions	System Responses				
<ul style="list-style-type: none"> Actor clicks on the “Organic Farming” link on home page of SAP 	<ul style="list-style-type: none"> Actor is redirected to “Organic Farming” application 				
Alternative Flow:	<table border="1"> <tr> <td> <ul style="list-style-type: none"> </td> <td> <ul style="list-style-type: none"> </td> </tr> </table>	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 		
<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 				
Exceptional Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td> <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled </td> <td> <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found </td> </tr> </table>	Actor Actions	System Responses	<ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	<ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Actor Actions	System Responses				
<ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	<ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found 				
Includes: other use case id					
UI: required/not required	Required				
Priority: Low/medium/high	High				
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent				
Business Rules:	<ul style="list-style-type: none"> 				
Special Requirements:					
Assumptions:	<ul style="list-style-type: none"> 				
Dependency:					
Notes and Issues:	<ul style="list-style-type: none"> . 				

4.4.9 Irrigation

Scope: This activity enables the actor to access the application for Irrigation

Use Case ID:	UC_SAP_044
Use Case Name:	Application for Irrigation

Actors:	Farmer / Citizen					
Stake Holder:	Farmer / Citizen					
Description:	This service aims at taking the actor to the Irrigation section					
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → Irrigation 					
Pre conditions:	Actor should have opened the State Agriculture Portal					
Post conditions:	Application for Irrigation section is loaded					
Input:						
Output:						
Normal Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td> <ul style="list-style-type: none"> Actor clicks on the “Irrigation” link on home page of SAP </td> <td> <ul style="list-style-type: none"> Actor is redirected to “Irrigation” application </td> </tr> </table>	Actor Actions	System Responses	<ul style="list-style-type: none"> Actor clicks on the “Irrigation” link on home page of SAP 	<ul style="list-style-type: none"> Actor is redirected to “Irrigation” application 	
Actor Actions	System Responses					
<ul style="list-style-type: none"> Actor clicks on the “Irrigation” link on home page of SAP 	<ul style="list-style-type: none"> Actor is redirected to “Irrigation” application 					
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 				
Exceptional Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td> <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled </td> <td> <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found </td> </tr> </table>	Actor Actions	System Responses	<ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	<ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found 	
Actor Actions	System Responses					
<ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	<ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found 					

Includes: other use case id	
UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.10 Drought Relief Information

Scope: This activity enables the actor to access the application for Drought Relief Information

Use Case ID:	UC_SAP_045
Use Case Name:	Application for Drought Relief Information

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Drought Relief Information section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Drought Relief Information	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Drought Relief Information section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Drought Relief Information” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Drought Relief Information” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		

Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.11 Fodder

Scope: This activity enables the actor to access the application for Fodder

Use Case ID:	UC_SAP_046
Use Case Name:	Link for Fodder

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Fodder section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Fodder	
Pre-conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Fodder section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Fodder” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Fodder” application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.12 Good Agricultural Practices

Scope: This activity enables the actor to access the application for Good Agricultural Practices

Use Case ID:	UC_SAP_047
Use Case Name:	Application for Good Agricultural Practices

Actors:	Farmer / Citizen
---------	------------------

Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to Good Agriculture Practice section	
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → Good Agricultural Practices 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Good Agricultural Practices section is loaded	
Input:		
Output:		
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> Actor clicks on the “Good Agricultural Practices” link on home page SAP Actor selects any one choice and the list of corresponding entity is displayed from the content management system. <p>**Refer annexure 7.2 for GAP on “Medicinal & Aromatic Plants”</p>	<p>System Responses</p> <ul style="list-style-type: none"> Actor is redirected to “Good Agricultural Practices” application displaying the following sections. <ol style="list-style-type: none"> Cereals and Millets Spices and Condiments Vegetables Cucurbitaceous Solanaceous Cool season vegetables Fruits Ornamental Plants Medicinal & Aromatic Plants Fodder Crops Green manure crops Agroforestry
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Exceptional Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	<p>System Responses</p> <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> . 	

4.4.13 Fisheries

Scope: This activity enables the actor to access the application for Fisheries

Use Case ID:	UC_SAP_048
Use Case Name:	Application for Fisheries

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Fisheries section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Fisheries 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Fisheries section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Fisheries” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Fisheries” Portal
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.14 Livestock

Scope: This activity enables the actor to access the application for Livestock

Use Case ID:	UC_SAP_049
Use Case Name:	Application for Livestock

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Livestock section	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Livestock 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Livestock section is loaded	

Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “Livestock” link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to “Livestock” Portal
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> . 	

4.4.15 Horticulture

Scope: This activity enables the actor to access the application for Horticulture

Use Case ID:	UC_SAP_050
Use Case Name:	Application for Horticulture

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Horticulture section	
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → Horticulture 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Horticulture section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “Horticulture” link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to “Horticulture” application
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found

Includes: other use case id	
UI: required/not required	Required
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.16 Floriculture

Scope: This activity enables the actor to access the application for Floriculture

Use Case ID:	UC_SAP_051
Use Case Name:	Application for Floriculture

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Floriculture section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Floriculture	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Floriculture section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Floriculture” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Floriculture” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	

Dependency:	
Notes and Issues:	▪ .

4.4.17 Government Policies and Initiatives

Scope: This activity enables the actor to access the application for Government Policies and Initiatives

Use Case ID:	UC_SAP_052
Use Case Name:	Application for Government Policies and Initiatives

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Government Policies and Initiatives section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Government Policies and Initiatives	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Government Policies and Initiatives section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Government Policies and Initiatives” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Government Policies and Initiatives” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.18 Download Forms

Scope: This activity enables the actor to download forms

Use Case ID:	UC_SAP_053
Use Case Name:	Application to download forms

Actors:	Farmer / Citizen
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Stake Holder:	Farmer / Citizen	
Description:	This service enables the actor to download forms	
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → Download Forms 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	List of forms with download option is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “Download forms” link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to page with list of forms with download option
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> . 	

4.4.19 FAQ

Scope: This activity enables the actor to access the application for Frequently Asked Questions

Use Case ID:	UC_SAP_054
Use Case Name:	Application for Frequently Asked Questions (FAQ)

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to FAQ Section	
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → FAQ 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for FAQ section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “FAQ” link on home page of Department of Agriculture 	System Responses <ul style="list-style-type: none"> Actor is redirected to “FAQ” application
Alternative Flow:	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.20 Online Advise

Scope: This activity enables the actor to access the application for Online Advise

Use Case ID:	UC_SAP_055
Use Case Name:	Application for Online Advise

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to the Online Advise section	
Trigger:	▪ Actor clicks on State Agriculture Portal → Online Advise	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Online Advise section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Online Advise" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Online Advise" application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.21 Interaction Platform

Scope: This activity enables the actor to access the platform for interaction

Use Case ID:	UC_SAP_056
Use Case Name:	Platform for Interaction

Actors:							
Stake Holder:							
Description:	This service aims at taking the actor to the Interaction Platform						
Trigger:	▪ Actor clicks on State Agriculture Portal → Interaction Platform						
Pre conditions:	Actor should have opened the State Agriculture Portal						
Post conditions:	Application for Interaction is loaded						
Input:							
Output:							
Normal Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td>▪ Actor clicks on the “Interaction Platform” link on home page of SAP</td> <td>▪ Actor is redirected to “Interaction Platform” application</td> </tr> </table>	Actor Actions	System Responses	▪ Actor clicks on the “Interaction Platform” link on home page of SAP	▪ Actor is redirected to “Interaction Platform” application		
Actor Actions	System Responses						
▪ Actor clicks on the “Interaction Platform” link on home page of SAP	▪ Actor is redirected to “Interaction Platform” application						
Alternative Flow:	▪						
Exceptional Flow:	<table border="1"> <tr> <td>Actor Actions</td> <td>System Responses</td> </tr> <tr> <td>▪ Clicks link but the Service URL is unavailable</td> <td>▪ Standard internet message for URL not found</td> </tr> <tr> <td>▪ Clicks link but the actor’s internet access has been temporarily disabled</td> <td>▪ Standard internet message for connection not found</td> </tr> </table>	Actor Actions	System Responses	▪ Clicks link but the Service URL is unavailable	▪ Standard internet message for URL not found	▪ Clicks link but the actor’s internet access has been temporarily disabled	▪ Standard internet message for connection not found
Actor Actions	System Responses						
▪ Clicks link but the Service URL is unavailable	▪ Standard internet message for URL not found						
▪ Clicks link but the actor’s internet access has been temporarily disabled	▪ Standard internet message for connection not found						
Includes: other use case id							
UI: required/not required	Required						
Priority: Low/medium/high	High						
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent						
Business Rules:	▪						
Special Requirements:							
Assumptions:	▪						
Dependency:							
Notes and Issues:	▪ .						

4.4.22 Search

Scope: This activity enables the actor to access the Search Application

Use Case ID:	UC_ SAP_ 058	
Use Case Name:	Application for Search	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Search	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Search 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Search section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Search” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Search” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.23 Sitemap

Scope: This activity enables the actor to access the Sitemap Application

Use Case ID:	UC_ SAP_ 059	
Use Case Name:	Application for Sitemap	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Sitemap	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Sitemap 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Sitemap section is loaded	

Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Sitemap” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Sitemap” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.24 Contact Us

Scope: This activity enables the actor to access the Contact Us Application

Use Case ID:	UC_SAP_060
Use Case Name:	Application for Contact Us

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Contact Us	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Contact Us 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Interface for Contact Us is loaded. When clicked on Submit, mail is sent to the e-mail id as provided in the system	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Contact Us” link on home page State Agriculture Portal 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Contact Us” page ▪ Following fields of information is displayed <ul style="list-style-type: none"> • Address • Telephone No • E-mail address • Comments (Address / telephone number and e-mail address retrieved from database)

Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.25 Add to Favorites

Scope: This activity enables the actor to access the "Add to Favorites" Application

Use Case ID:	UC_SAP_061
Use Case Name:	Application for "Add to Favorites"

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application so that the page can be added to "Add to Favorites"	
Trigger:	▪ Actor clicks on State Agriculture Portal → any page → Add to Favorites	
Pre conditions:	Actor should have opened the State Agriculture Portal and accesses any page in the portal	
Post conditions:	Application for Add to Favorites is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Add to Favorites" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Add to Favorites" application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.26 Tell A Friend

Scope: This activity enables the actor to access the Tell A Friend Application

Use Case ID:	UC_SAP_062
Use Case Name:	Application for "Tell a Friend"

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for "Tell a Friend"	
Trigger:	▪ Actor clicks on State Agriculture Portal → Tell a Friend	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Interface for "Tell a Friend" section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Tell a Friend" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Tell a Friend" page. Following fields are displayed <ul style="list-style-type: none"> • E-mail id of friend • Subject • Body <p>The link of the page is mailed to the e-mail id provided. Validation for e-mail id.</p>
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.27 Latest News

Scope: This activity enables the actor to access the "Latest News" Application

Use Case ID:	UC_SAP_063	
Use Case Name:	Application for Latest News	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Latest News	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Latest News 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Latest News section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Latest News" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Latest News" application. The content for this section is managed by users with privileges. This section is displayed only post publishing.
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.28 Announcements

Scope: This activity enables the actor to access the Announcements Application

Use Case ID:	UC_SAP_064	
Use Case Name:	Application for Announcement	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Announcements	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Announcements or To be flashed on screen 	

Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Announcements section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “Announcements” link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to “Announcements” application
Alternative Flow:	<ul style="list-style-type: none"> 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> Clicks link but the Service URL is unavailable Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> Standard internet message for URL not found Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> . 	

4.4.29 About This Portal

Scope: This activity enables the actor to access the About This Portal Application

Use Case ID:	UC_SAP_065
Use Case Name:	Application for “About This Portal”

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for “About This Portal”	
Trigger:	<ul style="list-style-type: none"> Actor clicks on State Agriculture Portal → About this Portal 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for “About this Portal” section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> Actor clicks on the “About this Portal” link on home page of SAP 	System Responses <ul style="list-style-type: none"> Actor is redirected to “About this Portal” page Content is already managed and published for this page by authorized users
Alternative Flow:	<ul style="list-style-type: none"> 	

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.30 Help

Scope: This activity enables the actor to access the Help Application

Use Case ID:	UC_SAP_066
Use Case Name:	Application for Help

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Help	
Trigger:	▪ Actor clicks on State Agriculture Portal → Help	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Help section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Help" link on home page 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Help" application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.31 Terms of Use

Scope: This activity enables the actor to access the “Terms of Use” Application

Use Case ID:	UC_ SAP_076
Use Case Name:	Application for Terms of Use

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for “Terms of Use”	
Trigger:	▪ Actor clicks on State Agriculture Portal → Terms of Use	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for “Terms of Use” section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Terms of Use” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Terms Of Use” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.32 Visitors Summary

Scope: This activity enables the actor to access the Visitors Summary Application

Use Case ID:	UC_SAP_077
Use Case Name:	Application for Visitors Summary

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Visitors Summary	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Visitors Summary 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for “Visitors Summary” section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Visitors Summary” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Visitors Summary” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.33 NewsLetter

Scope: This activity enables the actor to access the NewsLetter Application

Use Case ID:	UC_SAP_078
Use Case Name:	Application for NewsLetter

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for NewsLetter	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → NewsLetter 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for NewsLetter section is loaded	

Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Newsletter” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “NewsLetter” application (Option to add/edit and delete Newsletter under Content Management System is to be provided)
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.34 Feedback

Scope: This activity enables the actor to access the Feedback Application

Use Case ID:	UC_SAP_079
Use Case Name:	Application for Feedback

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Feedback	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Feedback 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Feedback section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Feedback” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Feedback” application ▪ Interface with following field is provided <ul style="list-style-type: none"> • Department • Section • Comments

		• Option to Submit
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.35 Press Media Coverage

Scope: This activity enables the actor to access the Press Media Coverage Application

Use Case ID:	UC_SAP_080
Use Case Name:	Application for Press Media Coverage

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Press Media Coverage	
Trigger:	▪ Actor clicks on State Agriculture Portal → Press Media Coverage	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Press Media Coverage section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Press Media Coverage" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Press Media Coverage" application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	

Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.36 Accessibility Statements

Scope: This activity enables the actor to access the Accessibility Statements Application

Use Case ID:	UC_ SAP_081
Use Case Name:	Application for Accessibility Statements

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Accessibility Statements	
Trigger:	▪ Actor clicks on State Agriculture Portal → Accessibility Statements	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Accessibility Statements section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Accessibility Statement” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Accessibility Statements” application
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.37 Grievance Management

Scope: This activity enables the actor to access the Grievance Management Application

Use Case ID:	UC_SAP_082	
Use Case Name:	Application for Grievance Management	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Grievance Management	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → Grievance Management 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Grievance Management section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Grievance Management” link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Grievance Management” application
Alternative Flow:	<ul style="list-style-type: none"> ▪ 	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	
Special Requirements:		
Assumptions:	<ul style="list-style-type: none"> ▪ 	
Dependency:		
Notes and Issues:	<ul style="list-style-type: none"> ▪ . 	

4.4.37.1 New Grievance registered

Scope: This activity enables the actor to register a grievance

Use Case ID:	UC_SAP_083	
Use Case Name:	Entry of new grievance	
Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service enables the user to enter a grievance into the system	
Trigger:	<ul style="list-style-type: none"> ▪ Actor selects Grievance Redressal option on Home page 	

Pre conditions:	Actor should have opened the State Agriculture Portal Users authorized to receive the grievance already listed/entered in system (based on user access)	
Post conditions:	Grievance is registered in the system and mail sent to actor and concerned authority for addressing the issue	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Grievances” link on State Agriculture Portal home page ▪ Actor is provided with following fields for information entry <ul style="list-style-type: none"> • Department (options of all relevant departments such as Agriculture, horticulture, floriculture etc is provided) • Section (options of all sections seeds, pesticides, soil etc is provided) • Option for Others is provided • Grievance / Issue • Additional information <ul style="list-style-type: none"> • Name of actor (optional) • Mobile number (optional) • E-mail ID (optional) • Options to Submit, Exit provided • Actor selects submit option 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to “Grievance Redressal” application ▪ On selection of Submit ▪ Information as entered by actor is registered in Database. ▪ Unique number assigned to the grievance for reference is displayed on screen for actor ▪ Mail /SMS sent to actor with receipt for grievance and details of grievance registered. Timelines for resolution of grievance also mentioned ▪ Mail is sent to concerned authority with details for grievance and timelines assigned
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor selects Exit option 	<ul style="list-style-type: none"> ▪ Actor is redirected to home page of State Agriculture Portal
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.37.2 View Grievance and take action

Scope: This activity enables the actor to view grievance and take appropriate action

Use Case ID:	UC_SAP_084
Use Case Name:	Action for grievance

Actors:	Agricultural offices, Block ADA , District DDA and A-DA	
Stake Holder:	Farmer / Citizen	
Description:	This service enables the user to take appropriate action	
Trigger:	<ul style="list-style-type: none"> ▪ Actor received mail for grievance 	
Pre conditions:	Actor should have opened the State Agriculture Portal Users authorized to receive the grievance already listed/entered in system receive it	
Post conditions:	Grievance is directed to person responsible to address it	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Grievances responsibility” link ▪ Actor is provided with following fields for information entry <ul style="list-style-type: none"> • Department (options of all relevant departments such as Agriculture, horticulture, floriculture etc is provided) • Section (options of all sections seeds, pesticides, soil etc is provided) • Option for Others is provided • Grievance / Issue • Grievance reference number • Responsibility (option to select user from list) • Time frame (option to enter number of days provided) • Actor selects submit option 	System Responses <ul style="list-style-type: none"> ▪ Information as entered by actor is registered in Database. ▪ Mail /SMS sent to actor under “Responsibility” field with details of grievance registered. Timelines for resolution of grievance also mentioned ▪ Mail is sent to concerned authority
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor selects Exit option 	<ul style="list-style-type: none"> ▪ Actor is redirected to home page of State Agriculture Portal
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	<ul style="list-style-type: none"> ▪ 	

Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.37.3 Resolution of Grievance

Scope: This activity enables the actor to resolve the grievance

Use Case ID:	UC_SAP_084
Use Case Name:	Resolution of grievance

Actors:	Agriculture Officer, Block ADA, District DDA and A-DA	
Stake Holder:	Farmer / Citizen	
Description:	This service enables the actor to provide resolution for grievance	
Trigger:	▪ Mail received from concerned authority to address grievance	
Pre conditions:	Actor should have opened the State Agriculture Portal Users authorized to receive the grievance already listed/entered in system	
Post conditions:	Grievance resolution is updated in the system and mail sent to actor and concerned authority with resolution	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the “Grievances Resolution” link on Grievance Redressal application ▪ Actor is provided with following fields for information entry <ul style="list-style-type: none"> • Grievance / Issue • Grievance reference number • Resolution comments • Option to submit 	System Responses <ul style="list-style-type: none"> ▪ Information as entered by actor is registered in Database. ▪ Mail /SMS sent to actor with receipt for grievance and details of grievance resolution ▪ Mail/SMS is sent to user who registered grievance and concerned authority with details for grievance and resolution
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor selects Exit option 	<ul style="list-style-type: none"> ▪ Actor is redirected to home page of State Agriculture Portal
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor’s internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	

Dependency:	If no mail id or phone number is provide by actor registering the grievance, resolution is displayed only to user information available (user details as registered)
Notes and Issues:	▪ .
Priority: Low/medium/high	High
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.37.4 Escalation of grievance

Scope: This activity enables the actor to escalate a grievance

Use Case ID:	UC_SAP_085
Use Case Name:	Escalation grievance

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen, concerned authority	
Description:	This service enables the user to escalate a grievance in the system	
Trigger:	▪ Actor selects Grievance Redressal option on Home page	
Pre conditions:	Actor should have opened the State Agriculture Portal Users authorized to receive the grievance already listed/entered in system (for escalation) Grievance is registered in the system	
Post conditions:	Grievance is registered in the system and mail sent to actor and concerned authority for addressing the issue post escalation	
Input:		
Output:		
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor clicks on the “Grievances” link on State Agriculture Portal home page ▪ Actor selects “Grievance Escalation” option ▪ Actor is provided with following fields for information entry <ul style="list-style-type: none"> • Grievance / Issue (registered earlier) • Grievance Reference Number • Comments (to enter details for escalation) • Options to Submit, Exit provided • Actor selects submit option 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Actor is redirected to “Grievance Redressal” application ▪ This option is available only when resolution is provided ▪ Information as entered by actor is registered in Database. ▪ Mail /SMS sent to actor with receipt for grievance and details of grievance registered. Timelines for resolution of grievance also mentioned ▪ Mail is sent to concerned authority (for escalation)with details for grievance and timelines assigned
Alternative Flow:	<ul style="list-style-type: none"> ▪ Actor selects Exit option 	<ul style="list-style-type: none"> ▪ Actor is redirected to home page of State Agriculture Portal

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id	Use cases for assigning responsibility and resolution to be used	
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.38 Expert Advisory

Scope: This activity enables the actor to access the Expert Advisory Application

Use Case ID:	UC_SAP_086
Use Case Name:	Application for Expert Advisory

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for Expert Advisory	
Trigger:	▪ Actor clicks on State Agriculture Portal → Expert Advisory	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for Expert Advisory section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on the "Expert Advisory" link on home page of SAP 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "Expert Advisory" application
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.38.1 Add New Query

Overview: The System provides a provision to the actor to Add a New Query, if he/she doesn't found the answer of his/her query available in the existing FAQ list on the SAP Portal/Service/Sub Service.

Use Case ID:	UC_SAP_087
Use Case Name:	Add New Query

Actors:	Primary Actor Farmer/Citizen who wishes to raise any query to get advice of the subject matter expert.
Stake Holder:	Farmer/Citizen
Description:	This use case allows actor to Add New Query on specific service/sub service.
Trigger:	The actor selects the option available State Agriculture Portal →View FAQ List->Add New Query.
Pre conditions:	Actor is viewing the service/ sub service home page or SAP user is logged in to the Portal and viewing the any Service/Sub service home page.
Post conditions:	<ol style="list-style-type: none"> 1. Submitted Query will be forwarded to the subject matter expert for acceptance/rejection. 2. The Status of the submitted query will be reflected as "Submit" on the Service Home Page and the SAP. 3. As the actor submit query, it would also be sent to the registered subject matter expert of the selected FAQ Category. 4. A System generated reference number against the submitted query will be sent to the actor's registered mobile number in local language. 5. Using this reference number, the actor can view the status of the submitted query on the Portal/ Service home page.
Input:	SAP service/sub service name FAQ category name Query Text

	<p>Actor enters the specified Captcha word.</p> <p>Actor fills all the above fields and submits the details.</p>	<p>j. Panchayat:</p> <ul style="list-style-type: none"> • System prompts the actor to select the district name from the drop down enlisting all the districts of the belonging State. • The System prompts the actor to select the Tahsil name from the drop box list wherein his belonging block exists. All the Tahsils belonging to the selected district will be displayed for selection • The System prompts the actor to select the block name from the drop down enlisting all the blocks of the selected Tahsil. • Depending on the selected block, the system will prompt the actor to select his/her Panchayat name from the drop down enlisting all the belonging Panchayats of that block. <p>k. Village:</p> <ul style="list-style-type: none"> • System prompts the actor to select the district name from the drop down
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		<p>enlisting all the districts of the belonging State.</p> <ul style="list-style-type: none"> • The System prompts the actor to select the Tahsil name from the drop box list wherein his belonging block exists. All the Tahsils belonging to the selected district will be displayed for selection • The System prompts the actor to select the block name from the drop down enlisting all the blocks of the selected Tahsil. • Depending on the selected block, the system will prompt the actor to select his/her Panchayat name from the drop down enlisting all the belonging Panchayats of that block. • The System will prompt the actor to select the village name from the drop down enlisting all the belonging villages of the selected Panchayat. • The Actor would specify the Survey Number of his/her land. <p>I. Captcha – The actor would be required to specify the Captcha</p>
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		<p>image being shown on the screen in the available text box.</p> <p>System responds with the message “FAQ Category was successfully submitted/ added in the system.”</p> <p>System responds with the message “Your Query has been successfully submitted.”</p>
<p>Alternative Flow:</p>	<p>None</p>	
<p>Exceptional Flow:</p>	<p>Actor attempts to submit without selecting the ‘FAQ Category name’</p> <p>Actor attempts to submit without entering the ‘Query text’</p> <p>Actor attempts to submit without entering the ‘Mobile Number’</p> <p>Actor attempts to submit without selecting the ‘Location Area Level’</p> <p>Actor attempts to submit without selecting the ‘District/Tahsil/Block/Panchayat/Village’</p> <p>Actor attempts to submit without specifying Survey No. if the selected Location Area Level is Village.</p>	<p>System displays the message “Please select the FAQ category name”</p> <p>System displays the message “Please enter value in Query Text”</p> <p>System displays the message “Please specify the mobile number”.</p> <p>System displays the message “Please select location area level”</p> <p>System displays the message “Please select District/Tahsil/Block/Panchayat/Village”</p> <p>The System displays the message, “Please specify the Survey No.”</p>
<p>Includes: other use case id</p>		

UI: required/not required	Required
Priority: Low/medium/high	Medium
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Medium
Business Rules:	<ol style="list-style-type: none"> 1. FAQ Category drop box would be populated basis the SAP Service/Sub Service name being browsed by the actor while adding the query. Refer Add FAQ Category use case. 2. Query should be routed to the respective Subject Matter Expert of the Service/Sub Service for answering. 3. While FAQ manager of SAP portal should be able to answer the query of any SAP Service/Sub Service. 4. Actor should be able to choose more than one query at a time to answer. This would be done for providing a single answer to similar type of queries available in the query list. 5. For actor as a Farmer/Citizen, Add Query option should be available on all pages of Service/Sub Service or SAP as global link. 6. Actor should be able to add query in any of the UNICODE supported languages.
Special Requirements:	None
Assumptions:	None
Dependency:	<p><u>Extends</u></p> <p>None</p> <p><u>Is Extended By</u></p> <p>None</p> <p><u>Uses</u></p> <p><u>SAP/Service/sub service Home Page</u></p> <p>Login (for SAP registered User)</p>
Notes and Issues:	None

4.4.38.2 Query Acceptance and Expert Advice

Scope: The expert advisory process relates to the advice sought by the farmers directly with subject matter experts at the state and national level, with regards to their queries on cropping lifecycle.

Use Case ID:	UC_SAP_088
Use Case Name:	Query Acceptance and Expert Advice

Actors:	Primary Actor Subject Matter Expert and authorized to give advices against the raised queries
Stake Holder:	Farmers/Citizen
Description:	This use case will provide a provision to the actor to give advices against the received queries.
Trigger:	The actor selects the option available State Agriculture Portal->Transactions and Work Flow->Query Acceptance and Expert Advice
Pre conditions:	<ol style="list-style-type: none"> 1. The actor must be registered on the SAP and logged in 2. There must be at least one query available in his/her expert advisory system.
Post conditions:	<ul style="list-style-type: none"> • If the actor accepts the queries, the queries would be reflected in his expert advice system to give response/advice. • The status of the accepted or rejected queries will be reflected on the SAP/Service home page. • As the actor accepts or rejects the query, system triggers an SMS to the registered mobile number of the stakeholder against the generated reference number. • If the actor doesn't respond to the query within 24 hours, it will be forwarded to the next level expert advice. • The saved answers of the experts will be stored in the database and would be available for publishing it to the actor with the assigned privileges (Director for Verification and Conformance.) • Saved answers would be available for modification/deletion. • Published answers would be added in the FAQ List and displayed on the home page of the SAP/Service and an SMS will be sent to the stakeholder's registered mobile number. • System should capture the User id of the actor forwarding the query along with Date & Time of forwarding the query. • In case query is forwarded by the actor, the query should be moved to the Answer

	<p>Query list of the specified SME for answering and the Query is removed from the actor's Answer Query list and moved to that of forwarded SME.</p> <ul style="list-style-type: none"> The replied queries should also be removed from that SME and should be carrying forward to the "Responded Query List". 	
<p>Input:</p>	<ul style="list-style-type: none"> One or Multiple Query Acceptance/Rejection. Adding responses/advices. 	
<p>Output:</p>	<p>The provided advices will be added to the FAQ Answer list and would be available to the stakeholder to view on the SAP/Service home page.</p>	
<p>Normal Flow:</p>	<p>Actor Actions</p> <p>1) The actor clicks on the option "Accept/Reject Query".</p> <ul style="list-style-type: none"> If the actor finds query relevant to his/her subject If the actor finds query irrelevant to his/her subject. If the actor finds relevant to any other Subject of the same service/Sub Service. <p>Once the Selected Queries get accepted by the actor,</p> <p>Once the Selected queries get rejected by the actor,</p>	<p>System Responses</p> <p>System displays the list of queries FAQ category wise as available to him/her for acceptance and advice.</p> <p>He/ She may accept the Query</p> <p>He/ She may reject the Query.</p> <p>He/ She may forward it to the relevant Subject Matter Expert.</p> <p>These will be reflected to the actor to give responses under Expert Advice option.</p> <p>The rejected queries will be discarded from the Expert Advice interface and would be displayed in the "Rejected Queries" link.</p>
	<p><i>The actor gives advices against the selected queries-</i></p> <p>Actor chooses to Answer Query</p>	<ol style="list-style-type: none"> Actor may either choose to Answer Query or Forward Query. System captures the following mandatory parameters in read only mode as specified by the stakeholder in the add a Query use case : <ol style="list-style-type: none"> SAP Service/Sub Service name

	<p>Actor clicks on the “FAQ Answer” link to add the query answer in the ‘FAQ Answer Text’.</p> <p>Actor saves the data</p> <p>Actor clicks on the Publish but</p>	<ul style="list-style-type: none"> – System displays the Service/Sub Service name. b. FAQ Category Name - System displays the FAQ category name. c. Query Text – System displays the query text. d. Location Area Level - System displays the selected District/Tahsil/Block/Panchayat /Village. e. Mobile Number f. Email Id – System displays the email id Answer – actor enters the answer to the query <p>system responds with the message “Query was successfully answered and added to the FAQ list”</p> <p>The given responses would be confirmed and added on the FAQ list.</p>
<p>Alternative Flow:</p>	<p>Alternative Flow 1:</p> <p>Actor chooses to Forward Query in while giving Advices in Step 1.</p>	<ul style="list-style-type: none"> 1. System displays the below options available for forwarding the query as ‘Forward to’. Actor can select any one of the mentioned options : <ul style="list-style-type: none"> a. Centre Level – In case actor selects Centre level, system

	<p>Actor enters remarks and click Forward link.</p> <p>Alternative Flow 2:</p> <p>Actor doesn't respond to the query within 24 hours of it's submission.</p>	<p>displays the name(s) and user ids of all users who have been assigned the role of Subject Matter Expert for the FAQ/Subject Category at Centre Level. Actor then selects the specific Centre SME from the drop box.</p> <p>b. State Level - In case actor selects State level, system captures the State Name from the actor. And displays the name(s) and user ids of all users who have been assigned the role of SME for the specified FAQ Category/ Subject in the selected State, Actor then selects the specific State SME from the drop box.</p> <p>c. District Level - In case actor selects District level, system further captures the State name and then District Name from the actor. And displays the name(s) and user ids of all users who have been assigned the role of SME for the specified FAQ/Subject in the selected District, Actor then selects the specific District SME from the drop box.</p>
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	Actor enters the remark and submits.	<p>System responds with the message “Query was forwarded successfully.”</p> <p>The System will automatically forward it to the next higher level of SME for give responses.</p> <p>System displays a message,” Response has been submitted successfully.”</p>
Exceptional Flow:	None	
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Medium	
Business Rules:	<ol style="list-style-type: none"> 1. Query is available to the respective SME of Service/Sub service FAQ Category for answering as per the SAP Service/Sub Service name. 2. While FAQ manager of SAP portal would be able to answer the query of any Service/Sub service. 3. Once answered, query should be removed from the list and forwarded to the View FAQ List. 4. The query should be answered in the language of the query only. 5. A query can be forwarded by the actor as many times as required by him/her. 6. The role SME would be available at all levels – Centre, State and District. 7. The Centre SME, State SME and District SME drop box list would be populated only with respect to the service/ sub service name of the query raised. 8. Forwarded Query should be removed from the actor’s Answer Query list and moved to another SME (to whom the query was forwarded by the actor). 	

	<p>9. In case actor is answering a Forwarded Query, he/she should be able to view following additional 'Forward details' on the query as (in Read only mode):</p> <ul style="list-style-type: none"> • Forward Remarks – Remarks entered by the actor while query was forwarded by him/her. • User id – User id of the actor who has forwarded this query. • Role (Centre SME/State SME /District SME) – Level/role to whom the query was forwarded. • State (in case Role is State SME) • District (in case District SME) • Date & Time – Date & Time when query was forwarded. <p>10. There would be as many 'Forward Details' visible to the actor while answering as many times the Query was forwarded before coming to him/her.</p> <p>11. All the unanswered Queries would be auto archived after every Time Frequency for 30 days (configurable parameter at SAP level).</p> <p>12. While all the archived queries would be auto deleted after the Duration of 60 days (configurable parameter at SAP level).</p>	
<p>Exceptions:</p>	<p>No Query available in the system for answering:</p> <p>Actor attempts to submit without entering the 'Answer':</p> <p>Actor attempts to Forward to Centre level while no users exists under Centre SME role:</p> <p>Actor attempts to Forward to State level while no users exists under State SME role:</p>	<p>System displays the message as "No Query Available."</p> <p>System displays the message "Please enter value in Answer"</p> <p>System displays the message "No Centre SME is available in the system."</p> <p>System displays the message "No State SME is available in the system."</p> <p>System displays the message "No District SME is available in the system."</p>

	Actor attempts to Forward to District level while no users exists under District SME role:	
Special Requirements:	None	
Assumptions:	<ul style="list-style-type: none"> a. The actor is registered either on SAP and access the application/service through single sign on. b. Hardware like computer/laptop system and network connection is available to the actor. c. The actor is having a valid mobile number. d. Actor is having an internet banking access, debit card and credit card 	
Dependency:	<p><u>Extends</u></p> <p>View Manage FAQ page</p> <p><u>Is Extended By</u></p> <p><u>None</u></p> <p><u>Uses</u></p> <p>Login</p>	
Notes and Issues:	None	

4.4.39 MAPS

Scope: This activity enables the actor to access the MAPS application

Use Case ID:	UC_SAP_089
Use Case Name:	Application for MAPS

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for MAPS	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → MAPS 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for MAPS section is loaded	
Input:		
Output:		
Normal Flow:	<p>Actor Actions</p> <ul style="list-style-type: none"> ▪ Actor clicks on the “MAPS” link on home page of SAP 	<p>System Responses</p> <ul style="list-style-type: none"> ▪ Actor is redirected to “MAPS” application ▪ Map of India with filter options to select following <ul style="list-style-type: none"> • Crops • Topological Information • Weather • Seeds • Fertilizers

	<ul style="list-style-type: none"> ▪ Actor selects any filter from options 	<ul style="list-style-type: none"> • Pesticides ▪ Map of India with filter selected is displayed
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.39.1 State MAP

Scope: This activity enables the actor to access the State Map application

Use Case ID:	UC_SAP_091
Use Case Name:	Application for State Map

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for MAPS to view state maps	
Trigger:	<ul style="list-style-type: none"> ▪ Actor clicks on State Agriculture Portal → MAPS → Any State 	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for State Maps section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on any "State" on Map Of India with filter 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to "State Map" application ▪ Map of the selected State with filter selected is displayed (Refer Annexure) – drill down report on the state selected
Alternative Flow:	▪	▪

Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.4.39.2 District Map

Scope: This activity enables the actor to access the District Maps application

Use Case ID:	UC_SAP_092
Use Case Name:	Application for District Maps

Actors:	Farmer / Citizen	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at taking the actor to application for District Maps	
Trigger:	▪ Actor clicks on State Agriculture Portal → MAPS → Any State → Any District	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Application for District Maps section is loaded	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Actor clicks on any district on the State Map 	System Responses <ul style="list-style-type: none"> ▪ Actor is redirected to District Maps application ▪ Map of District with filter selected for state is displayed (Refer Annexure)
Alternative Flow:	▪	
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	

Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent
Business Rules:	▪
Special Requirements:	
Assumptions:	▪
Dependency:	
Notes and Issues:	▪ .

4.4.40 Flash season specific Information

Scope: This activity enables the system to flash season specific Information

Use Case ID:	UC_ SAP_093
Use Case Name:	Application to flash season specific Information

Actors:	System	
Stake Holder:	Farmer / Citizen	
Description:	This service aims at displaying crop information relevant to the season/month	
Trigger:	▪ System based trigger which runs based on season/month of crop	
Pre conditions:	Actor should have opened the State Agriculture Portal	
Post conditions:	Season specific display for crops	
Input:		
Output:		
Normal Flow:	Actor Actions <ul style="list-style-type: none"> ▪ 	System Responses <ul style="list-style-type: none"> ▪ System displays information relevant to Crop for the season in this section. ▪ Database is fed with inputs for <ul style="list-style-type: none"> • Seasons • Crops for the season • Information to be displayed
Alternative Flow:	▪	▪
Exceptional Flow:	Actor Actions <ul style="list-style-type: none"> ▪ Clicks link but the Service URL is unavailable ▪ Clicks link but the actor's internet access has been temporarily disabled 	System Responses <ul style="list-style-type: none"> ▪ Standard internet message for URL not found ▪ Standard internet message for connection not found
Includes: other use case id		
UI: required/not required	Required	
Priority: Low/medium/high	High	
Frequency of Use: Continuous/ frequent/ medium/ less/ rare	Frequent	
Business Rules:	▪	
Special Requirements:		
Assumptions:	▪	
Dependency:		
Notes and Issues:	▪ .	

4.5 User Characteristics

The users of the State Agricultural Portal have been specified in section 3.1. The users of the State Agricultural Portal will be people with various technical & non-technical backgrounds. application will be primarily used by the farmers, officials of Village Panchayats, Block Panchayats, District Panchayats, State Agriculture Departments, Private and Government Institutions, Agencies, Dealers, Kisan Call Centers and Ministry of Agriculture. Apart from these users, some of the reports can be viewed by other Central Line Ministries/Departments and also the common man for the purpose of social audit.

The Government and Private Institutions Officials are being provided with basic working knowledge of computers under various capacity building programmes, however they are not very familiar with computer based applications. Accordingly, the user interfaces should be intuitively designed so that it is fairly simple, easy to use and self-explanatory. The software should allow the users to switch-over to local language so that all the textual elements are displayed in local language for better understanding and effective use. The State and Central Ministry's users are already working with computers and are fairly conversant with computer based applications.

The software will facilitate the farmers and the other users who are having any disability to read and understand the textual elements by receiving voice messages in their local language and the images related to the text mouse over.

The user interface of the State Agricultural Portal will include radio buttons, tables, forms, pull-down menus, submit buttons, etc, all features that are conform W3C XHTML standard. Any user with a basic understanding of the Internet and knowledge about his/her browser software should be able to make use of all the available functionality of the portal.

1. The application will be an internet based application which will be designed, developed and centrally hosted
2. The users will be accessing the software application using various connectivity scenarios.
3. As the application will be used by State Agriculture Departments (no of departments), Center and MoA, Government and Private Institutions, dealers, agencies, KCCs, the no. of application users and concurrent users will be very high as mentioned in non-Functional Requirements. The software has to take into account all sorts of communication

environments and slow communication links as specified in Chapter 6. The software should also scale-up as per the requirements defined in Chapter 6.

4. The application will support only Unicode enabled fonts for local language representation.
5. The State Agriculture Portal will need to interoperate with other software applications which are being developed as part of Mission Mode Project including Central Agriculture Portal and State Agriculture Portal indicated in Non-Functional Requirements.
6. The State Agriculture Portal will be constrained by the minimum hardware specifications that are likely to be available in the production environment, the details of which are specified as part of Non-Functional Requirements in Chapter 6.
7. The stakeholder groups (farmers, private sector and the government) could use the proposed service delivery channels (CSC, Department, KCC, SCC, Private Kiosks, Mass Mobile, IVRS, Agri clinics and agri business centres) to initiate service requests; which would be processed by the Central and State Agriculture Portals (depending on the level of service request generation and processing location).

4.6 Assumptions and Dependencies

Common features including Login, Logout, Forgot password, Change Password, User management features etc. which will be used across all software applications as part of Mission Mode Project will be developed commonly and uniformly. The availability of software applications with which the State Agriculture Portal would be interoperating will be crucial for smooth functioning of State Agricultural Portal.

It is assumed that the third party tools and applications software wherever required to fulfill the functionality of State Agriculture Portal will be available on the machines where such features will be executed. These may include office tools for viewing the PDF and charts generated by the package. Further, a use case wise description of assumptions have been described, wherever applicable, as part of Functional Requirements.

4.7 Acceptance Criteria

This SRS document will stand accepted once DAC accord a formal approval to this document.

4.8 General Constraints

It is an attempt to provide comprehensive, accurate, and reliable one stop source of information about Indian Agriculture and its various facets. To achieve the main goal we need to follow various standard, guidelines and policy. The main guidelines and policies which we need to follow are:

1. Guidelines for Indian Government Websites
2. Content Contribution, Moderation and Approval Policy
3. Content Review Policy
4. Content Archival Policy

4.9 Assumptions and Dependencies

The users must have a web browser that supports W3C XHTML and have a TCP/IP connection to the web server

HTTP traffic must be possible on the network connection between the server and the client.

4.10 The State Agricultural Portal - Content Management System

The Portal will be developed as a Mission Mode Project under the National E-Governance Plan of the Government. The objective behind the Portal is to provide a single window access to the information and services being provided by the Indian Government for the citizens and other stakeholders. An attempt has been made through this Portal to provide comprehensive, accurate and reliable and one stop source of information about Indian Agriculture and its various facets.

The content which is very crucial to the success of this Portal is the result of a collaborative effort of various Indian Government Ministries and Departments as well as State Governments. The National portal coordinators, nominated by various Ministries/ Departments as well as State Governments will be contributing the Content to the portal as well as maintaining it through a simple web based Content Management Interface.

4.11 State Agricultural Portal Coordinators & Content Contributors

Classification	Stakeholder
Central Level	<ul style="list-style-type: none"> ○ Divisions of Department of Agriculture & Cooperation (DAC) ○ Directorate of Extension ○ Directorate of Marketing & Inspection (DMI) ○ Directorate of Plant Protection, Quarantine & Storage (DPPQS) ○ National Seeds Corporation (NSC) ○ Central Insecticides Board & Registration Committee (CIBRC) ○ Regional Plant Protection & Quarantine Station (RPPQS) ○ Central Insecticides Laboratory (CIL) ○ Central Fertilizer Quality Control & Training Institute (CFQCTI) ○ National Centre for Organic Farming (NCOF) ○ State Farm Corporation of India (SFCI) ○ National Seed Association of India (NSAI) ○ National Institute of Agriculture Extension & Management (MANAGE) ○ Fisheries Division, Department of Dairy and Animal Husbandry ○ Indian Meteorological Department (IMD) ○ Food Corporation of India (FCI) ○ Jute Corporation of India ○ Cotton Corporation of India ○ Indian Council for Agricultural Research (ICAR) ○ National Informatics Centre (NIC) ○ Kisan Call Centre
State Level	<ul style="list-style-type: none"> ○ Divisions of State Department of Agriculture ○ Central Integrated Pest Management Centres (CIPMC) ○ Locust Warning Organization (LWO) ○ State Seeds Corporation ○ State Seeds Certification Agency ○ State Indian Meteorological Department ○ Agro-Meteorological Forecasting Unit (AMFU) ○ State Warehouse Corporation

Classification	Stakeholder
State Level	<ul style="list-style-type: none"> ○ State Agriculture University (SAU) ○ Krishi Vigyan Kendra (KVK) ○ Extension Education Institutes ○ Regulated Marketing Committees (RMC) ○ State Agricultural Marketing Boards (SAMB) ○ Directorate of Fisheries ○ State Call Centres ○ Soil Testing Laboratories ○ Pesticide Testing Laboratories ○ Fertilizer Testing Laboratories ○ Seed Testing Laboratories ○ Agricultural Department farms and Labs Producing Inputs ○ Kissan Kerala Project ○ Farm Information Bureau ○ Vegetable and Fruit Promotion Council ○ State Agmark grading Labs ○ Kerala State seed development authority ○ State Horticulture Mission ○ Marketing – Nafed, Kerafed, marketfed, serifed, hortcorp
Others	<ul style="list-style-type: none"> ○ Multi Commodity Exchange of India ○ National Commodity & Derivates Exchange Limited ○ Private Sector Manufacturers, Wholesalers & Dealers ○ Importers and exporters of agriculture produce ○ Traders and Buyers ○ Agri Business Clinics & Centres ○ Commodity Boards ○ Coconut Board ○ Spices Board ○ Rubber Board ○ Tea Board ○ Coffee Board

Classification	Stakeholder
	<ul style="list-style-type: none"> ○ Directorate of Arecanut and Cashew etc.

4.12 Content management System and Workflow Management

The CMS can be accessed at URL of the SAP. The login screen will prompt the user for their user id and password to enable using the CMS modules. The User will be advised to change his/her password the first time he/she logs into the CMS.

4.13 Content Validity

Validity Up to field has to be incorporated in the entire interface. Content which does not expire i.e., perpetual, should allow the content contributor to put in the 10 years hence date. Only content like announcements will not be displayed on the portal after the expiry of the validity date. It is proposed to develop Reminder Module if so required with the following functionality.

The first Reminder will be issued to the content contributor along with the content two weeks prior to the validity date.

The second reminder will be sent along with the content 1 week prior to the validity date and then two days before the valid up to date the final moderator to take the decision whether to show the content on portal or not.

4.14 Accessing Portal Content CMS

The home page of Central Agricultural Portal - Portal Content will be accessible using URL of the SAP, across the world to any user through Internet.

One should be able to navigate through the State Agricultural Portal - Portal Content Home page with or without mouse and Keyboard.

It will be supported across different Operating Systems and Browser.

The home page of State Agricultural Portal - Portal Content will have normal login screen for the authorization of the content contributors and link to the State Agricultural Portal home page.

4.15 Logon to the State Agricultural Portal CMS

Structure of Home page of the State Agricultural Portal CMS will be like below:

On the top of home page, there will be a graphic image across the width of home page signifying India's National Emblem, Farmer, Project etc. Link on the image will lead to State Agricultural Portal Home page.

To facilitate content contribution and approval any authorized user can login through State Agricultural Portal - CMS home page.

4.16 Content Management System User Interface

Main Menu: - After login into Content Management System, the page will consist of

1. Welcome message to the user who logged in
2. Contents Section- containing links to the contents listing and contributions
3. Reference Documents section containing links to different documents related with State Agricultural Portal.

5. NON-FUNCTIONAL REQUIREMENTS

5.1 Performance Requirements

Performance is one of the major issues related with any Portal. It is proposed to use state of the art infrastructure for the best performance of the State Agricultural Portal as per the “Guidelines for Indian Government Websites”. The hardware and software proposed to be used for the hosting of the State Agricultural Portal is mentioned in different sections of this document.

The maximum time for download of Home page of the State Agricultural Portal should be 10 sec when average 1000 number of users is accessing the portal simultaneously at modem speed of 64 Kbps.

The maximum time for download of other page of the State Agricultural Portal should be 25 sec with same condition as above. The maximum time for download of Search page of the State Agricultural Portal should 30 sec with same condition as above. Maximum Number of hits served in an hour may be 1,50,000.

5.2 Design Constraints

Major portion of the portal is based on a set of design templates. The pages are designed for a screen resolution of 1024X768.

Home page:

This is the entry page of the portal and contains the links to the all the modules of the portal. The home page template is unique and only applies to one page. The rest of the pages are based on a set of five design templates.

Design templates

Level 1 template: pages listing the major sub modules

Level 2 pages: pages containing the navigation of the sub modules up to the last level

Content pages: last level page that links the content present in the portal

External link window: the external sites open in this window

Search pages: Pages containing search functionality

Templates components

Main header: This establishes the government of India identity and project name on the template and it is the same for all the templates.

Sub header: The sub header identifies the section or module of the portal

Navigation bar: This shows the path to the current level from the homepage technically known as breadcrumbs

Global Navigation: This contains the links to the major modules of the portal

Content area: The content area displays content according to the level of the template

Footer: Footer contains the links to the other sections on the same level in that module

Links to the Home, About the Portal, Site Map, Link to Us, Add to Favorites, Suggest to a Friend, Help, Terms of Use, Feedback, Design Copyright Information

Related information: This contains banners and other related information

5.3 Standard Compliance

The State Agricultural Portal will be developed in compliance with the standard of “Guideline for Indian Government Websites”. The State Agricultural Portal must conform to W3C standard guidelines.

5.4 Software System Attributes

-  **Reliability:** - The architecture of the hardware has to be designed in such a way that there is enough redundancy of servers in production environment. If one server goes down, the service should not be interrupted. All the hardware should have AMC and resident engineer shall be there to look after any hardware failure.
-  **Availability:** - The State Agricultural Portal shall be available 24/7, from any computer having a web browser and a TCP/IP connection to the web server. In case of a software or hardware failure the administrator should perform a rollback to the last consistent backup. In case of a general failure (software or hardware) the downtime is proposed to be less than 2 hours.
-  **Security:** - The State Agricultural Portal should be hosted in a secured and protected zone with implementation of firewalls and IDS (Intrusion Detection System) and high availability solutions.

Before launch of the State Agricultural Portal, it shall be tested for the simulated penetration testing.

Penetration testing should also be conducted after the launch of the State Agricultural Portal regularly.

The State Agricultural Portal should be audited for known application level vulnerabilities before the launch.

Hardening of servers should be done as per the guideline of Cyber Security division of NIC before the launch of the State Agricultural Portal.

Access to State Agricultural Portal web servers should be restricted both physically and through the network as far as possible.

Log shall be maintained at three different locations for authorized physical access of State Agricultural Portal servers.

All the development work is proposed to be done on separate development environment and should be tested on staging server before updating it on the production server.

The content contribution through the remote location would be through authenticated way and not be published on the production server directly. Any content contributed has to go through the moderation process to the final publishing to the production server.

All contents of the web pages shall be checked for intentional or unintentional malicious content before final upload of the same in web server pages.

Audit and Log of all activities referring to the operating system, access to the system, and access to applications shall be maintained and archived. All rejected accesses and services will be logged and listed in exception reports for further scrutiny.

All newly released system software patches; bug fixes and upgrades should be expediently and regularly reviewed and installed on the web server.

On Production web servers, Internet browsing, mail and any other desk top applications should be disabled. Only server administration related task would be performed.

- ✚ **Maintainability:** - Whereas the coding is concerned, it shall be well documented as per industry standard. It is recommended to have complete backup and restoration procedure for State Agricultural Portal. Also there will be policy for defacement and DR.
- ✚ **Portability:** - State Agricultural Portal shall be hosted on servers without any restriction or compatibility issues for access of the State Agricultural Portal across all major operating systems like all Linux variants, Windows, MAC etc and almost all browsers available across the Operating Systems mentioned.

6. CONCLUSION

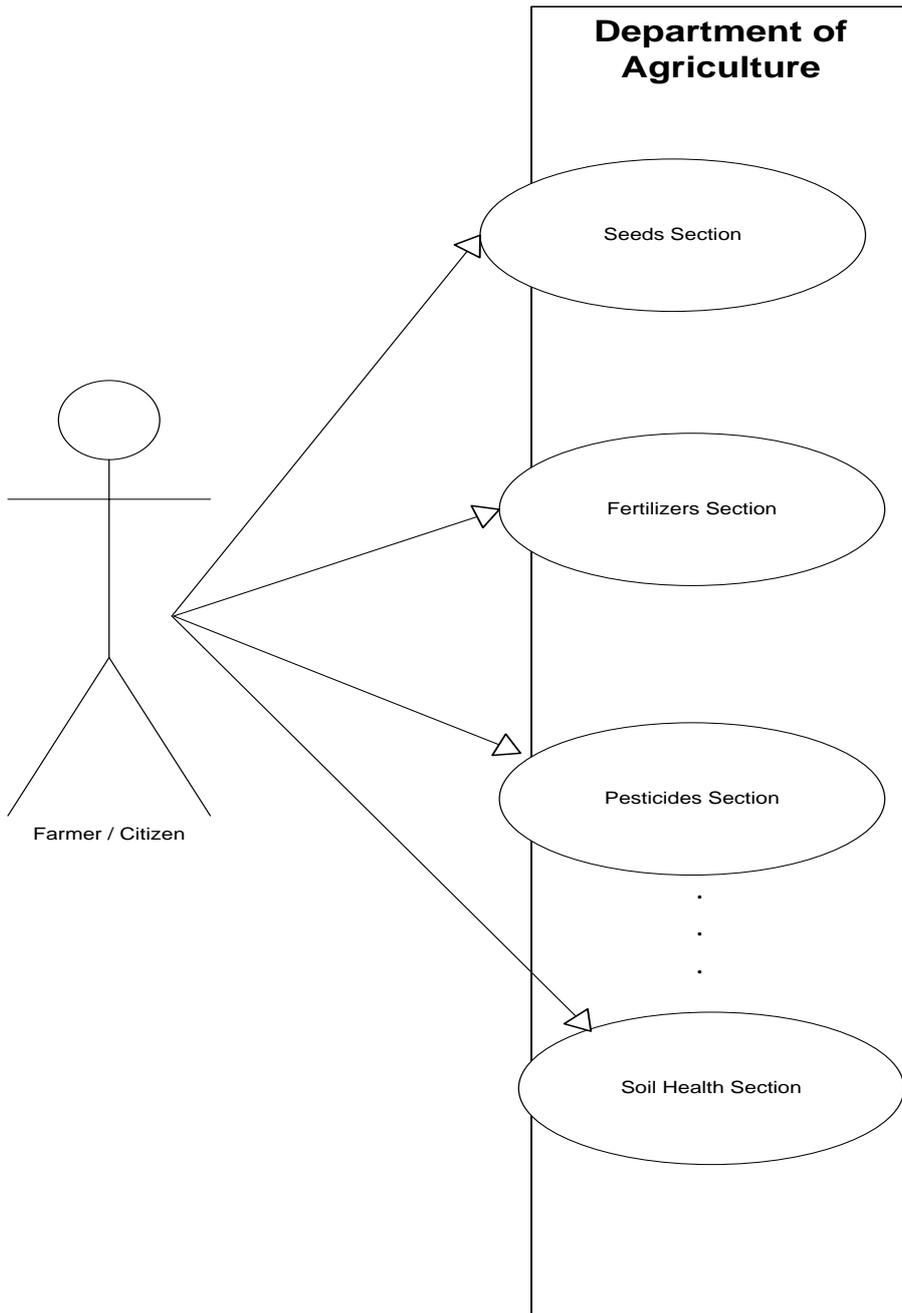
The success of the State Agricultural Portal lies in the efficient delivery of services to the farmers. In measuring efficiency it would be important to understand the processes within and outside the government framework. Private sector brings with itself a large experience in providing services to the farming community at the field level; and the government brings an in-depth knowledge of the bottlenecks that it may face during the delivery of the services. By creating a common platform for both public and private sector to assimilate their resources and create an exchange by means of which services can be provided to the farmers, would amount a natural success of the proposed initiative.

7. ANNEXURES

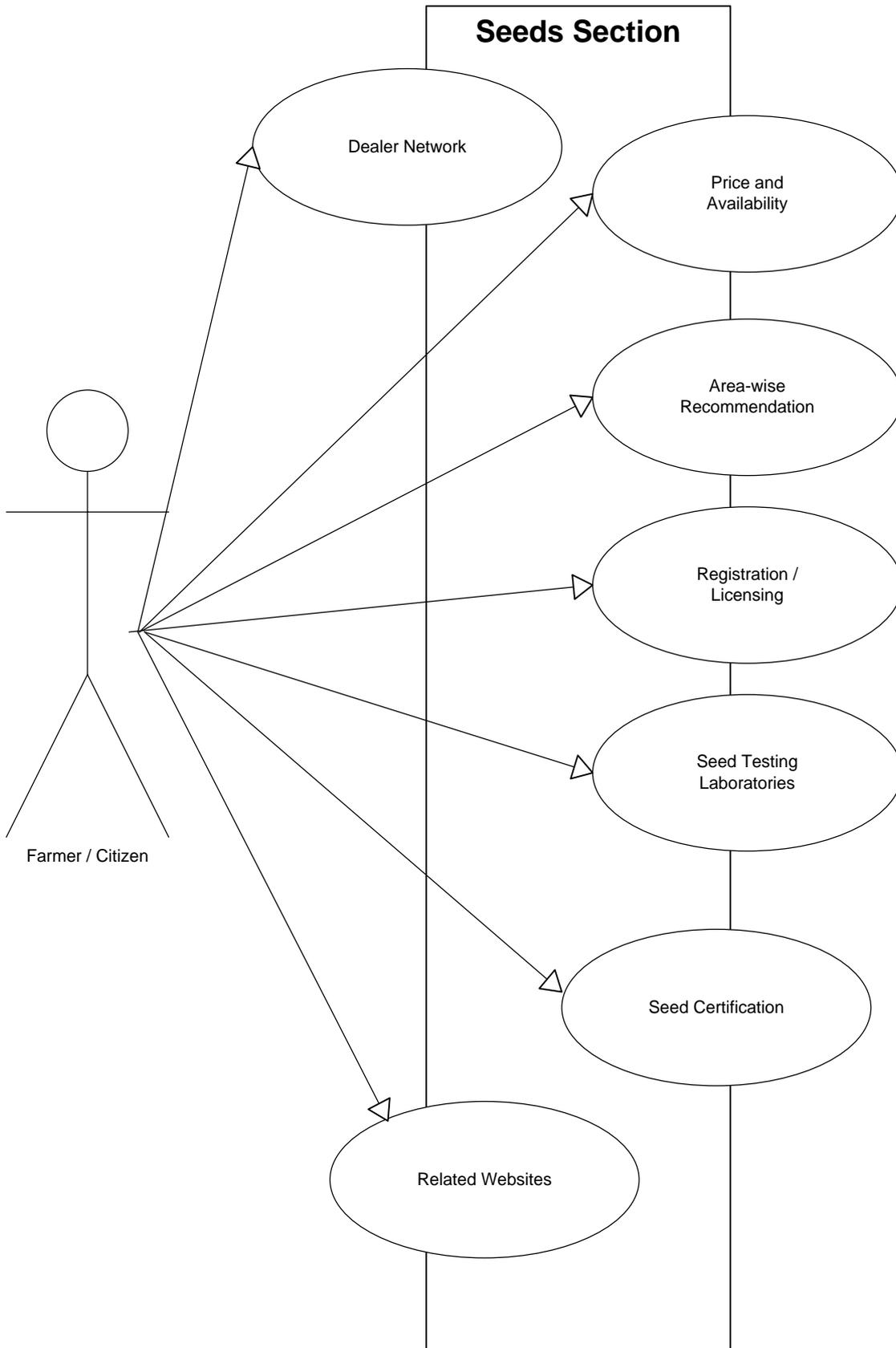
7.1 Use Case Diagrams

1. State Agriculture Portal

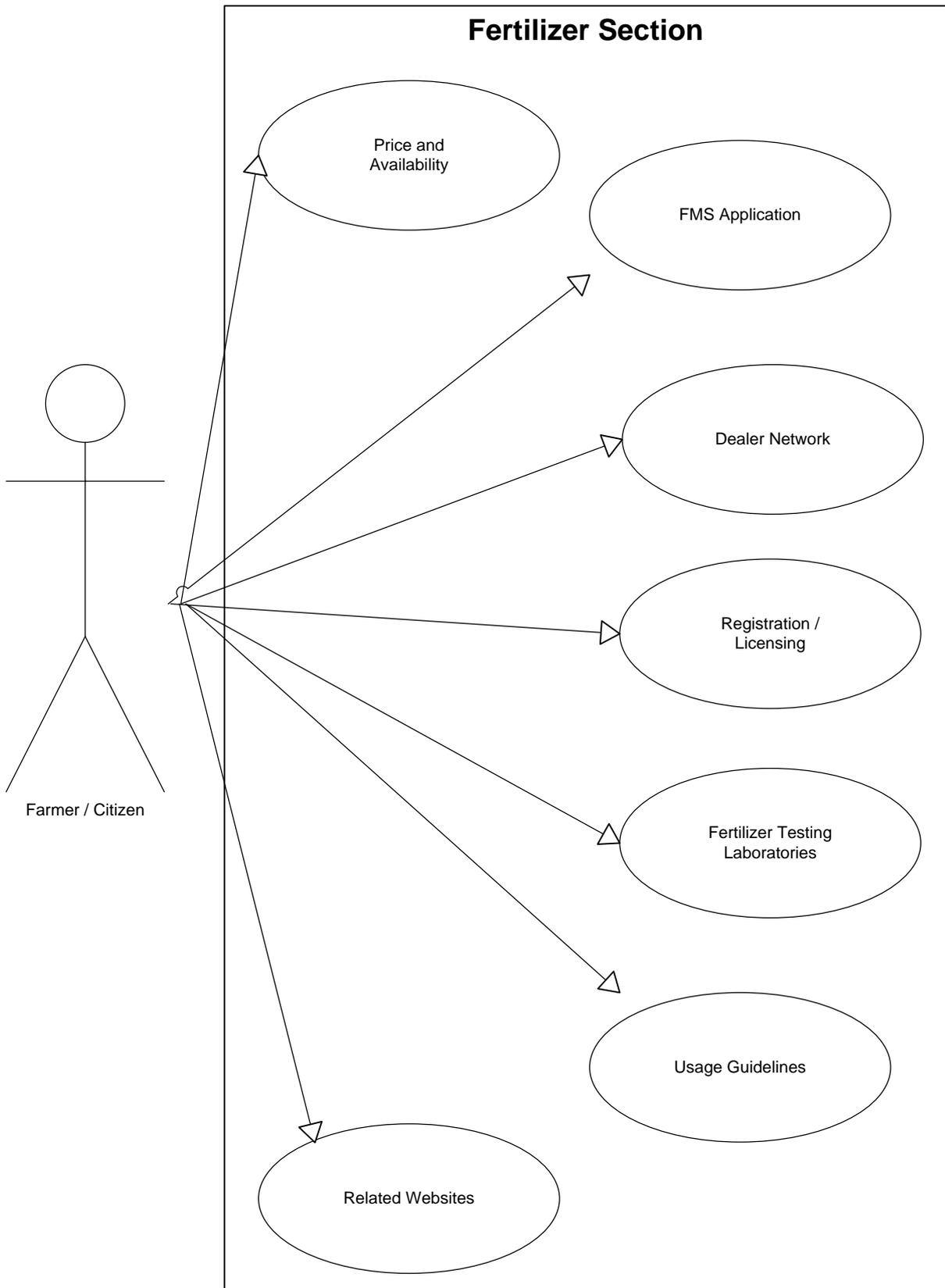




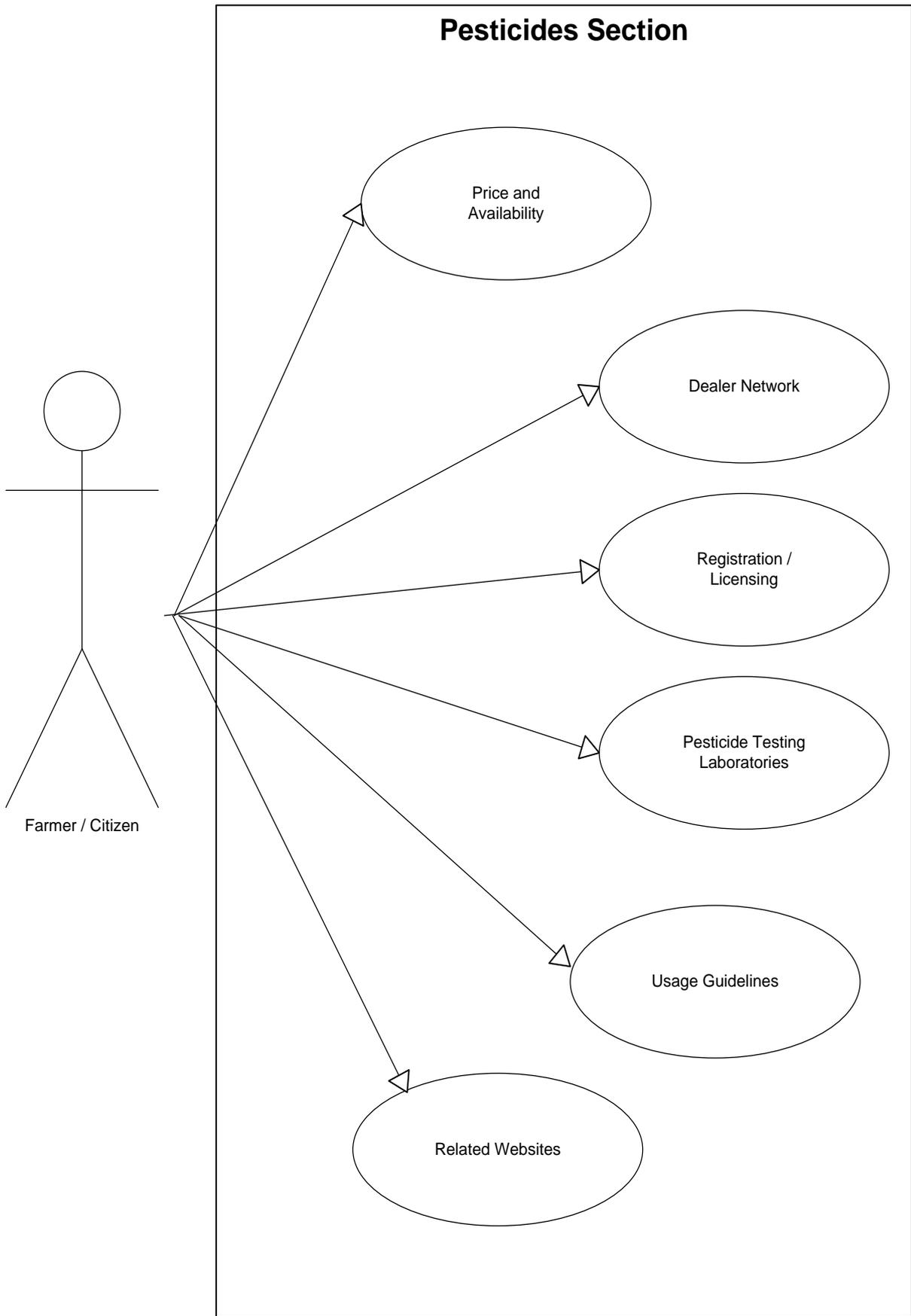
2. Seeds Section



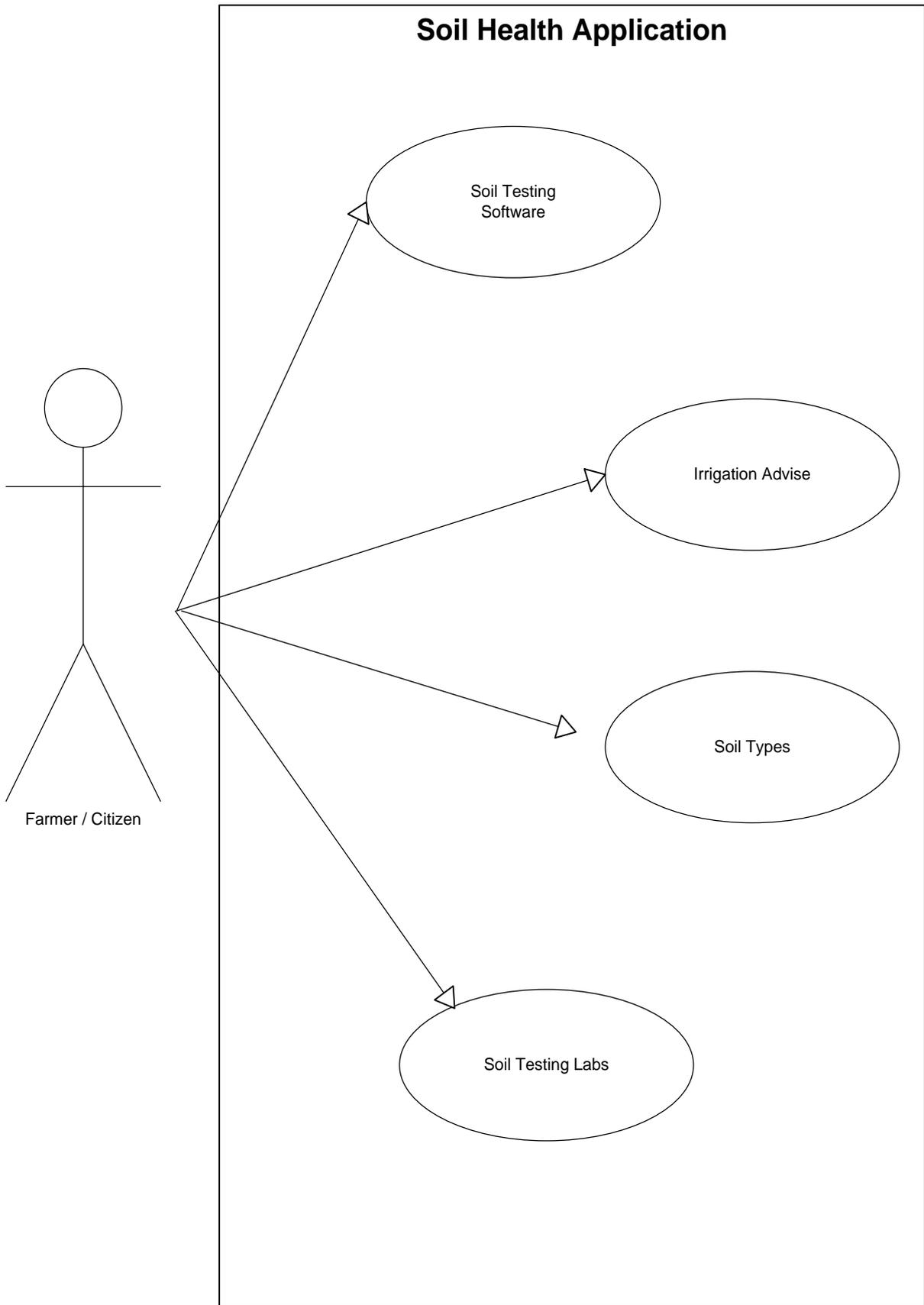
3. Fertilizers Section



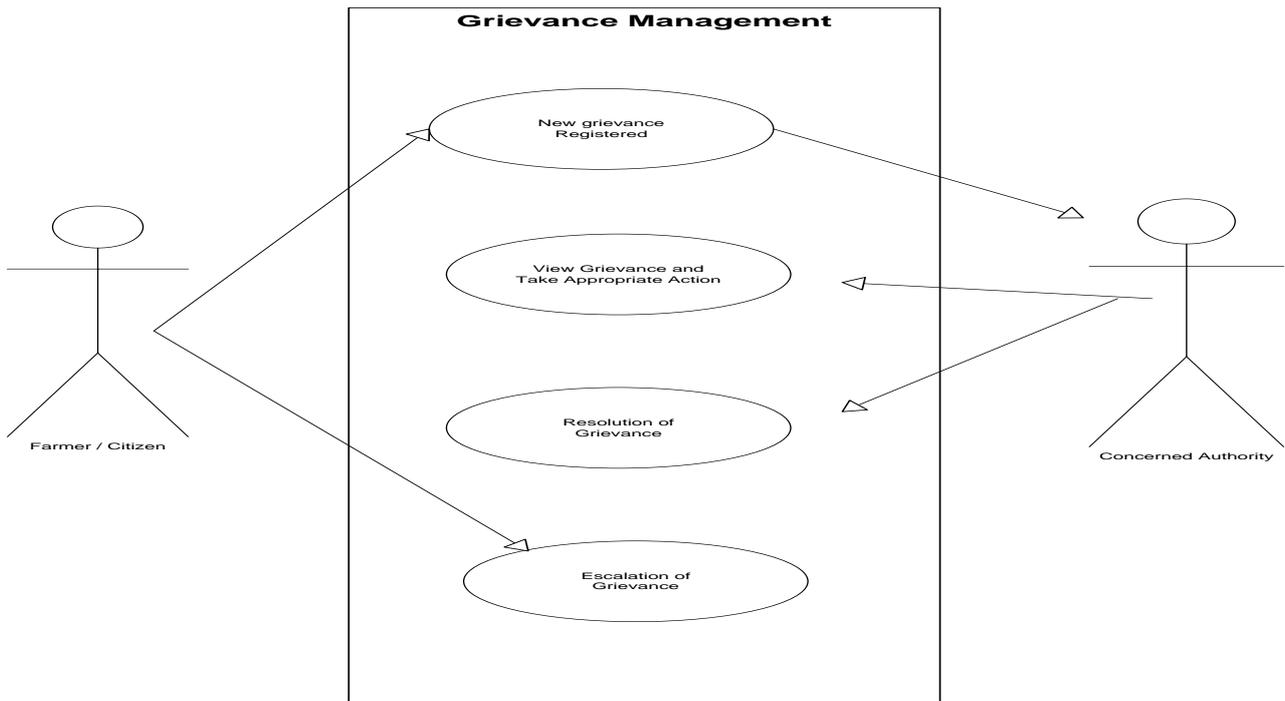
4. Pesticides Section



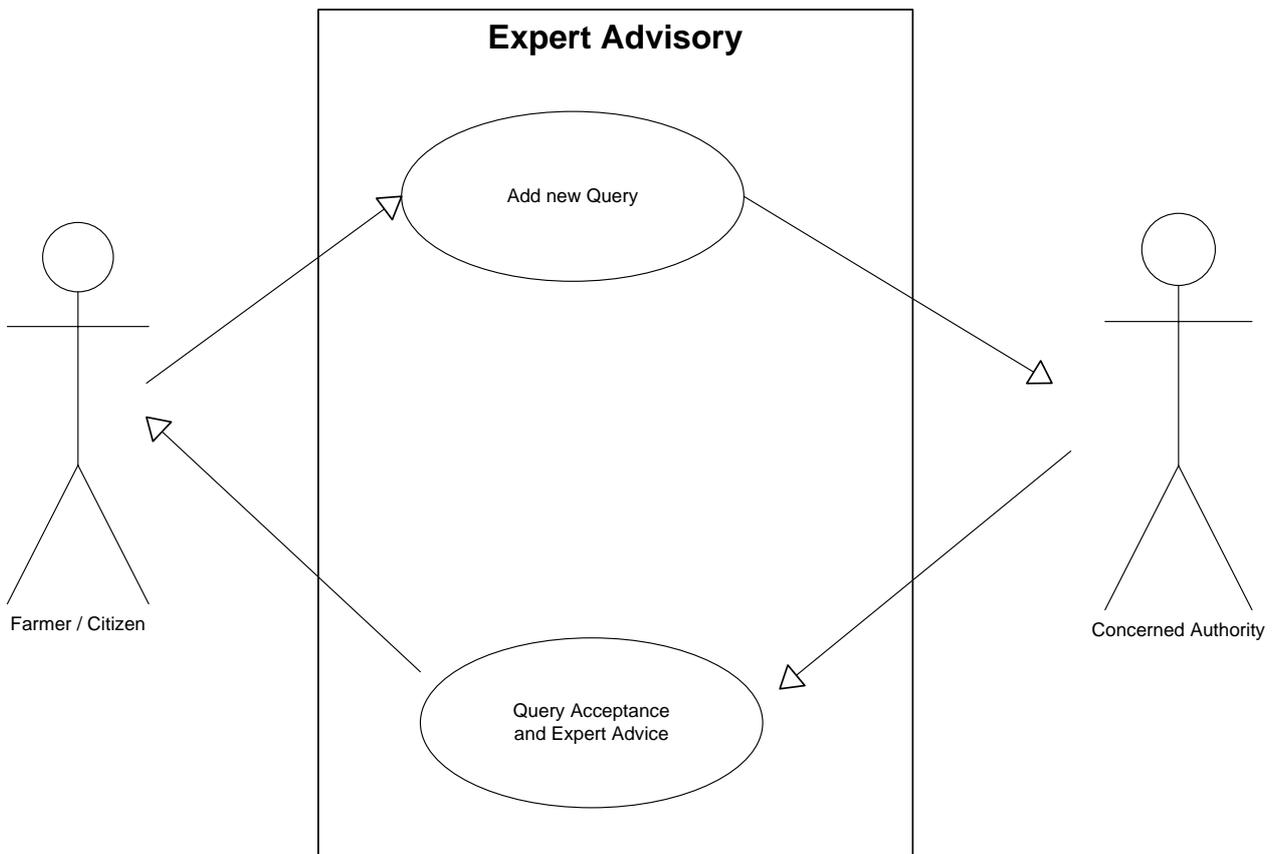
5. Soil Health Section



6. Grievance Management



7. Expert Advisory

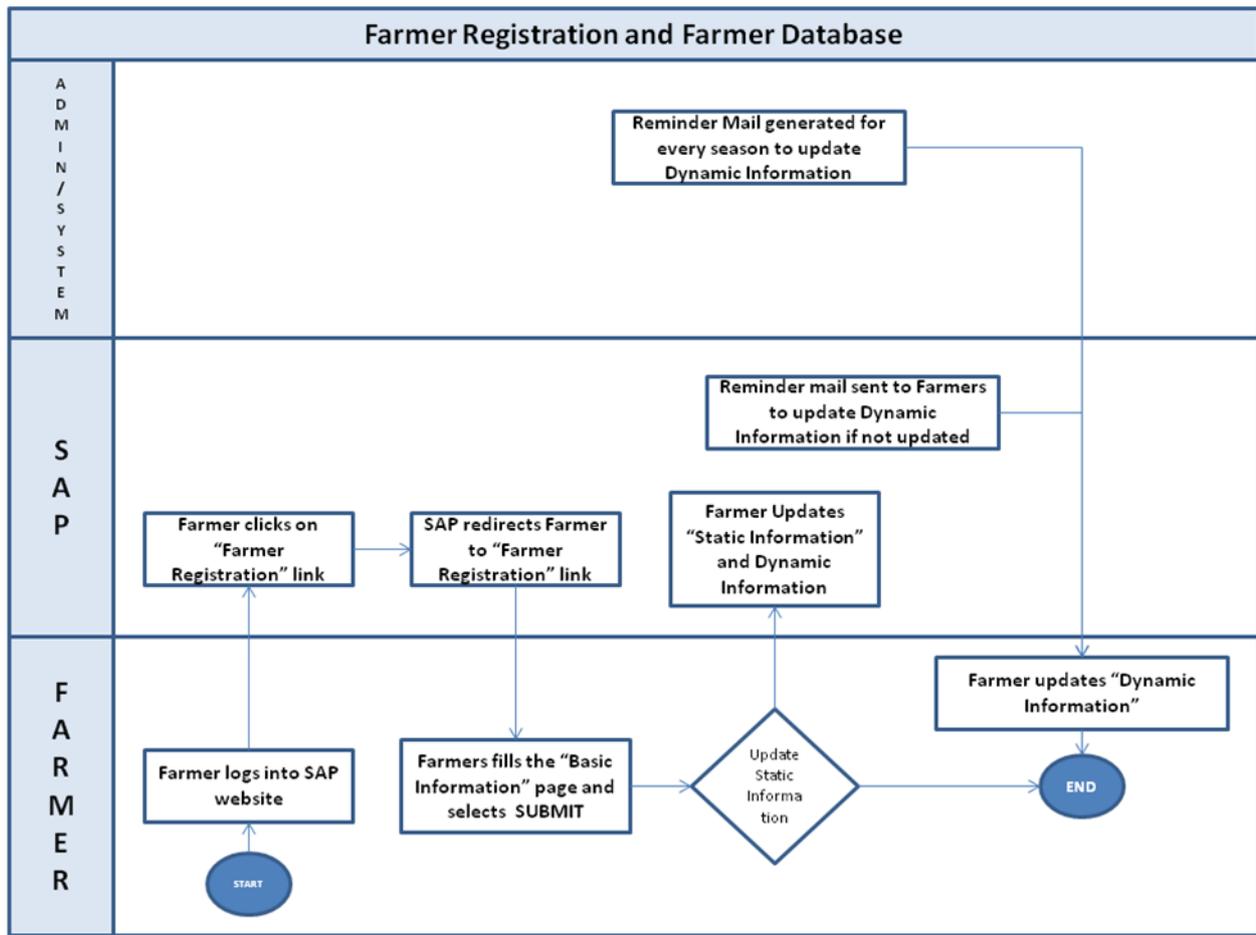


8. Farmer Registration



I) Farmer's Database

Farmer Registration/Database Workflow



A. Minimum Required data elements (HCF)

1. Farmer's detail
 - a. Name (First Name, Middle Name, Last Name)
 - b. Address (State, District, Block, Village, Pin Code (Link with Post database))
 - c. Phone - Landline
 - d. Mobile number
 - e. e-mail id
 - i. Farmer Type (Agricultural, Livestock, Fisherman)

B. Sum Total of Required data elements (LCM) for 360 degree view

a. Static Information

1. Farmer's detail
 - a. Name (First Name, Middle Name, Last Name)
 - b. Address (State, District, Block, Village)
 - c. Phone - Landline

- d. Mobile number
 - e. e-mail id
 - f. Farmer Type (Agricultural -Crop, Horticulture, Sericulture, Apiculture, Floriculture, Forestry etc., Livestock, Fisherman)
 - g. Farming Sub Category
 - i. Crop farming-Rice, Maze, sugarcane etc.
 - ii. Fish farming-Trout, Lobsters etc.
 - iii. Horticulture farming(Apple, Mango etc.)
 - h. Father's name
 - i. Mother's name
 - j. Gender
 - k. Age (Date of birth)
 - l. Marital status
 - m. Photo
 - n. Identification (Voter id, Ration Card, UID, Driving License, KCC No.,NPR, Fishermen Biometric card etc.)(Integration with respective databases)
 - i. Personal Identification Mark
 - o. Educational Qualification
 - i. Illiterate/Literate
 - ii. Non-Matric, Matric, Graduate, Post-Graduate, Diploma, Other
 - iii. Field
2. Family details
- a. No. of family members (Dependent)
 - b. Name(First Name, Middle Name, Last Name), Gender, Relationship with farmer, age, Educational qualification, whether employed, if yes, then income, photo
3. Farm details
- a. Land Holding details (Survey No., Rakba, Rin Pustika No., Survey/subdivision number, Sub-Survey No. etc.) (Integration with Land Records)
 - b. Farm Size (In Bigha/Acres/Hectares/..) (Based on it automatic categorization as Landless Farmer(0 – 3 Bigha / 0 - 0.4 Hectares) , Marginal Farmer (3 – 7.5 Bigha / 0.4 – 1 Hectares), Small Farmer (7.5 – 15 Bighas / 1-2 Hectares) , Big Farmer (More than 15 Bighas / More than 2.0 Hectares)
 - c. Soil type
 - d. Land type - Irrigated/Rainfed/Dryland
 - e. Irrigation Infrastructure available on farm (wells, tube wells, drip irrigation, etc.)
 - f. Type of Cultivation (Self / Lease / Share)
 - g. Man Power for Farming Self / Hired Basis
 - h. Type of area
 - i. Area under Nursery
 - ii. Area under vegetable crops

- iii. Area under permanent crops
 - iv. Area under progeny orchard
 - v. Planting materials
 - vi. Tuber crops
4. Crop details
- a. Crops cycles
 - b. Crops grown
5. Livestock details
- a. Number of animals owned
 - b. Species, Animal, breed, age
6. Equipment details
- a. Name of equipment
 - b. Number
 - c. Make
7. Source of agricultural Inputs
- a. Name and address of the dealer/agency (Seed, Fertilisers, Pesticides)
8. Markets accessed for produce
- a. Name of the market and address
9. Bank details
- a. Bank name
 - b. MICR No
 - c. Branch Name and Code
 - d. Account Number
 - e. Loan as on date
 - f. Kisan Credit Card Holder (Yes/No)
10. Insurance details
- a. Name of the agency
 - b. Type of insurance
 - c. Insured on
 - d. Policy no
 - e. Date of maturity
 - f. Premium
 - g. Mode of payment
11. Family Economical Status

- a. APL/BPL/AAY (Antyodaya Anna Yojana)
- b. Annual Income
 - i. From farm
 - ii. From livestock
 - iii. From fisheries
 - iv. From other activities (specify)

12. Source of knowledge /Technical updating

- a. State Agriculture Departments, KVK, SAU, ICAR, Helpline (toll Free numbers), Meetings, Trainings/ Workshops, TV, Radio, SMS, Progressive Farmers, Extension Workers, etc.

13. Other

- a. House (Owned / Rental) (Pakka / Kaccha)
- b. Size of house (sq. meters/feet)
- c. Caste/ Category (SC/ST/BC/OBC/Gen)
- d. Religion
- e. Minority (Yes/No)
- f. Membership in societies/ groups like PACS, Agricultural Co-operatives, NGOs, SHGs etc.
 - i. Name of the agency
 - ii. Address details
 - iii. Membership number
 - iv. Date of issue
 - v. Date of validity

b. Dynamic Information to be filled every season

1. Year, Season (Rabbi/ Kharif)
2. Inputs
 - a. Crop Sown
 - b. Area Sown
 - c. Variety used
 - d. Seeds used
 - e. Fertilisers used
 - f. Pest occurrence and pesticides used
 - g. Water sources used
 - h. Labour
 - i. Machinery used
3. Production, Income, Expenditure, Insurance
 - a. Crop wise production
 - b. Crop wise income

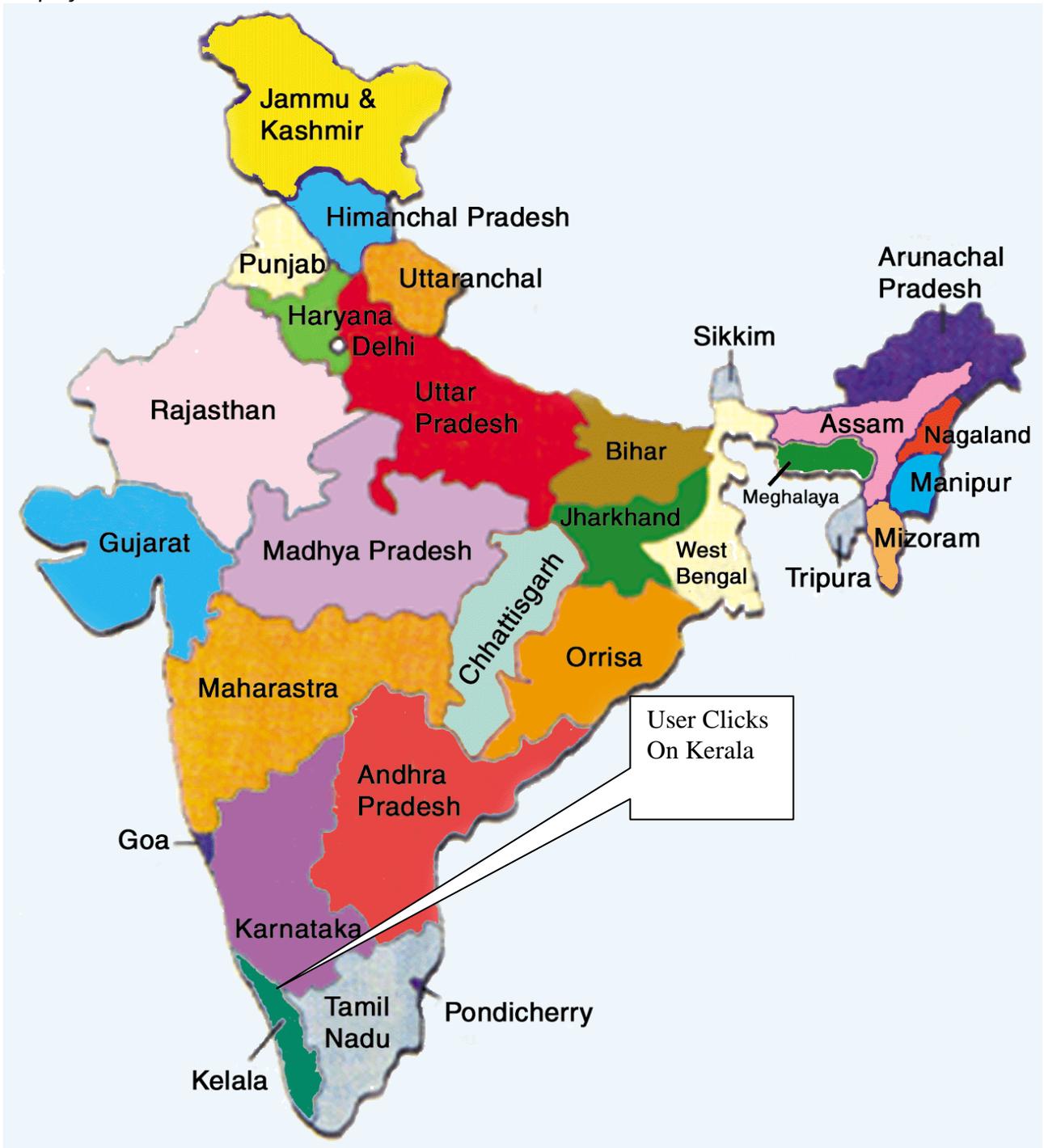
- c. Expenditure
- d. Crop Insurance details
 - i. Name of the agency
 - ii. Type of insurance
 - iii. Insured on
 - iv. Policy no
 - v. Date of maturity
 - vi. Premium
 - vii. Mode of payment
- 4. Marketing
 - a. Warehouse facility used
 - b. Processing facilities used
 - c. Markets

Integration with

1. DMS database for National Dairy farmer database
2. National marine fishermen database
3. Land Records database
4. NPR Register, UID database, Post database,

II) MAPS Application – Drill-Down Report

Map of India



State Map



User can click any district. (e.g. Thiruvananthapuram)

District Map



III) Standards to be used

MDDS – Demographic (Person Identification and Land Region Codification) Standards by DIT

7.2 CROPS CULTIVATED IN KERALA

<double-click to open pdf file>

CULTIVATED CROPS OF KERALA

Common Name	Malayalam Name	Botanical Name	Family
Cereals			
Chama (little millet)	Chama	<i>Panicum sumatrense</i>	Poaceae
Kodo millet	Varagu	<i>Paspalum scrobiculatum</i>	Poaceae
Maize	Cholam	<i>Zea mays</i>	Poaceae
Rice	Nellu	<i>Oryza sativa</i>	Poaceae
Ragi (Finger millet)	Koovaraku	<i>Eleusine coracana</i>	Poaceae
Pulses			
Black gram	Uzhunnu	<i>Vigna mungo</i>	Fabaceae
Cowpea	Perumpayar	<i>Vigna unguiculata</i>	Fabaceae
Green gram	Cherupayar	<i>Vigna radiata</i>	Fabaceae
Horse gram	Muthira	<i>Macrotyloma uniflorum</i>	Fabaceae
Red gram	Thuvarappayar	<i>Cajanus cajan</i>	Fabaceae
Tubers			
Colocasia	Chembu	<i>Colocasia esculenta</i>	Araceae
Carrot	Carrot	<i>Daucus carota</i>	Apiaceae
Elephant foot Yam	Chena	<i>Amorphophallus paeoniifolius</i>	Araceae
Potato	Urulakizhangu	<i>Solanum tuberosum</i>	Solanaceae
Radish	Mullangi	<i>Raphanus sativus</i>	Brassicaceae
Sweet potato	Cheenikizhangu	<i>Ipomoea batatas</i>	Convolvulaceae
Turnip	Seemamullangi	<i>Brassica rapa</i>	Brassicaceae
Tapioca	Maracheeni	<i>Manihot esculenta</i>	Euphorbiaceae
Greater Yam	Kachil	<i>Dioscorea alata</i>	Dioscoreaceae

7.3 GAP of “Medicinal & Aromatic Plants”

www.amprsagrotech.gov.in (under development)

Lemongrass (*Cymbopogon flexuosus*)

Family: Poaceae

- [+ Agro-Ecological Requirements](#)
- [+ Botany](#)
- [+ Varieties](#)
- [+ Propagation](#)
- [+ Planting and Aftercare](#)
- [+ Pest and Disease Management](#)
- [+ Harvest](#)
- [+ Processing](#)

Lemongrass is a tropical perennial grass. The name lemongrass is derived from typical lemon-like odour of essential oil present in shoot.

Annual world production of lemongrass oil is around 1000 tonnes from an area of 16000 ha. In India, it is cultivated in about 4000 ha and annual production is around 250 tonnes.

Distribution

Lemongrass, originally found in Asia, is now common in Africa, West Indies, Guatemala and China. Lemongrass grows wild in India and is cultivated well in Kerala, Assam, Maharashtra and Uttar Pradesh.



in
India

Properties and Uses

Lemongrass oil is commonly used as an ingredient in the making of citrusy soaps and perfumes. The oil is used as a repellent against flies and mosquitoes. It is often used in floor cleaning lotions and personal care products, like deodorant etc.

The oil is used as analgesic, anti-depressant, anti-microbial, anti-pyretic, anti-inflammatory, anti-oxidant, anti-septic, astringent, bactericidal, carminative, deodorant, diuretic, febrifuge, fungicidal, galactagogue, insecticidal, nervine, sedative, tonic etc.

Lemongrass oil is used as a precursor in the synthesis of Vitamin A.

Dried lemongrass leaves are widely used as a lemon flavour ingredient in herbal teas. Lemongrass is used in Asian cooking.

Lemongrass oleoresin is mainly used in flavouring foods, drinks and bakery preparations. used in flavours, cosmetics and perfumes.

Residue obtained after extraction of oil is called spent grass. It can be used as cattle feed fresh or after ensilaging. It can be used for mulching or manuring crops as such or after composting.

Leaves of lemongrass can be used as a source of cellulose in

<p> <u>Agro-Ecological Requirements</u></p>	<p>manufacture of paper and cardboard.</p> <p><i>C. flexuosus</i> flourish in sunny, warm, humid conditions of the tropics. Lemongrass grows well between 900 and 1250 m from mean sea level. Rainfed areas with annual precipitation of more than 500mm and with limited availability of irrigation water; salt affected areas; wind and erosion prone areas; sloppy lands; river /canal banks; areas prone to damage of agricultural crop by wild animals; orchards and plantations having about 30% shade etc can be utilized for lemongrass cultivation. Day temperature of 25-30°C is optimum for maximum oil production, with no extremely low night temperature.</p> <p>The sandy loam to loam soils in assured drainage facility and average soil fertility are considered ideal for cultivation. Plants growing in sandy soils have higher leaf oil yield and citral content it is grown in almost all types of land available from very light sandy soil to upland laterites. Soils of pH 5.5 to 7.5 are utilized.</p>
<p> <u>Botany</u></p> 	<p>Generally, three species are identified.</p> <p><i>C. flexuosus</i> (Nees ex Steud) Wats. (2n=20, 40)</p> <p>It is known as East Indian, Cochin or Malabar grass. <i>C. flexuosus</i> is a tufted robust perennial grass of about 2 m height. Leaves are linear and lanceolate. It flowers freely. Inflorescence is very large and a highly branched terminal drooping panicle bearing paired spikes on tertiary branches. Spikes bear spikelets in pairs of which one is sessile and other pedicellate. The sessile spikelet is an awned bisexual floret where as the pedicellate is an awnless staminate floret. Under this species, two varieties or types are identified based on colour of stem.</p> <p><i>C. flexuosus</i> var. <i>flexuosus</i> is the red grass. Stem and leaf sheath are reddish or purple. It is recognized as true lemongrass and is commercially cultivated. The essential oil contains more than 75-80% citral, exhibits good solubility in alcohol and hence is superior in quality.</p> <p><i>C. flexuosus</i> var. <i>albescens</i> is the white grass characterized by white colour of stem. Plant is normally seen wild. Essential oil contains less than 65-70% citral, exhibits poor alcohol solubility and hence considered inferior in quality.</p> <p><i>C. citratus</i> (DC) Stapf. (2n=40, 60)</p> <p>It is known as West Indian or American lemongrass. It is a stemless</p>

	<p>perennial grass with numerous stiff tillers arising from short rhizomatous rootstock, making large tussocks. It seldom flowers under cultivation. Leaf blade is narrow, linear, glaucous, drooping with scabrous margin, ligule truncate, inflorescence rarely produced, a large loose panicle; spathe bracts long and narrow, sessile spikelets, awnless, linear and lanceolate. Essential oil contains 74-76% citral and exhibits poor alcohol solubility.</p> <p><i>C. pendulus</i> (Nees ex Steud) Wats.</p> <p>It is Jammu lemongrass and is white stemmed and dwarf in nature. Plant is frost resistant and suited to Sub-Himalayan areas of North India. Essential oil contains around 75-80% citral and exhibits medium solubility in alcohol.</p>
<p> <u>Varieties</u></p>	<p>Lemongrass varieties released for cultivation are Sugandhi, Pragati, Praman, RRL-16, CKP-25, RRL-39, Kavery, Krishna, SD-68, GRL-1 and SB-9.</p> <p>Sugandhi (OD-19): Released from and Medicinal Plants Research (AMPRS), Odakkali, Kerala, India.  Aromatic Station A red range of stemmed variety adapted to a wide soil and climatic conditions and the most popular in India. Plant grows to a height of 1-1.75 m with profuse tillering, yielding 35-40 tonnes/ha/year herb containing 0.3% oil (125 kg/ha) with 80-85% citral under rain-fed condition.</p> <p>Pragati (LS-48): Evolved through clonal selection from OD-19 at Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow, India. It is tall growing with dark purple leaf sheath, adapted to North Indian Plains and ‘Tarai’ belt of subtropical and tropical climate. Average oil content is 0.63% with 86% citral.</p> <p>Praman (Clone 29): It is evolved through clonal selection at CIMAP, Lucknow and belongs to species <i>C. pendulus</i>. It is a tetraploid type with profuse tillering. Leaves are erect and medium in size. Oil yield is 227 kg/ha/annum with 82% citral content.</p> <p>Kavery and Krishna: Released from CIMAP Regional Station,</p>

	Bangalore, India.	
<p>+ <u>Propagation</u></p>	<p>Seed harvest: Herbage is not collected for distillation from lemongrass kept for seed purpose as seed yield from plants subjected to regular leaf cutting is very low. Generally, plant flowers during November-December in plains and mature seeds are collected during January-February. A healthy plant produces 10 to 20 g of seeds. The whole inflorescence is cut and dried in sun and seeds are collected by thrashing against floor or beating with sticks. Seed germination is very poor in fresh seeds due to dormancy. It can be sown after two months of storage but seeds lose viability beyond six months of storage.</p> <p>Mode of propagation Seed propagation : Seed is mixed with dry river sand in 1:3 ratio and broadcasted @ 20 to 25 kg/ha. Alternatively, seedlings are raised in a nursery in one-tenth of area of main field and transplanted after 45 days. This requires 3-4 kg seeds/ha and is ideal for uniform stand and better growth. Seeds have a dormancy of a few weeks and they lose viability in a few months. Small plantation can be established by planting slips.</p> <p>Selection criteria for planting materials The seeds collected during January-February are sown in the nursery during April-May after dormancy period. Germination declines drastically after October.</p> <p>Nursery techniques The field is made to fine tilth by repeated ploughing and seeds are uniformly broadcasted in raised beds of 1 to 1.5 m width and convenient length and covered with a thin layer of soil and irrigated judiciously. Seeds germinate in 5-7 days.</p>	    

Planting and Aftercare

Land preparation

Field is to be ploughed thoroughly and made into a fine tilth and raised beds are prepared

Field planting

Seedlings raised in nursery are transplanted in field at 6-7 leaf stage (45-60 days old) during monsoon at 30 cm x 30 cm spacing. Recommended plant density of 111000/ha.

With the onset of rains, healthy clumps are uprooted, detopped at a height of 20-25 cm, roots pruned and healthy slips separated and planted at 90 cm x 60 cm spacing.

Initial care and growth regulation

Immediately after planting, in absence of rain, irrigation is to be provided

Nutrient management

Spent lemongrass compost at 10 t /ha and wood ash at 2 t /ha, obtained as by-products of grass distillation are applied at time of bed formation. Lemongrass requires 600 kg urea, 250 kg mashooriphos, 290 kg potash etc are to be applied/ha/annum) (275 kg N, 50 kg P₂O₅ and 175 kg K₂O). Excess fertilizer application is undesirable as it promotes more vegetative growth and oil with less citral content.

Water management

In case of drought, crop should be irrigated every alternate day for about a month after planting.

Weed management

Maintain field weed free for initial 3-4 months period.

Crop rotation

After a period of six years new planting is to be undertaken

Multiple cropping

Along with lemon grass, eucalyptus can be grown



<p><u>Pest and Disease Management</u></p>	<p>Pest and diseases No serious pest and diseases occur in the crop. Leaves become smaller in size and flowers in inflorescence get converted to very small leaves in case of little leaf caused by virus. Remove and burn such plants to reduce spread of disease and avoid collecting seeds from such plants. Common diseases and their causal agents are given below</p> <table border="1" data-bbox="483 801 1161 1552"> <thead> <tr> <th>Disease</th> <th>Causal organism</th> </tr> </thead> <tbody> <tr> <td>Little leaf (malformation of inflorescence)</td> <td><i>Balensia sclerotica</i> (Pat) Hohnel</td> </tr> <tr> <td>Leaf spot (eye spot)</td> <td><i>Helminthosporium saccharii</i>, <i>H. leucostylum</i>, <i>Drechslera victo</i> and <i>D. helm</i></td> </tr> <tr> <td>Leaf spot</td> <td><i>Curvularia andropogonia</i> (CLS)</td> </tr> <tr> <td>Leaf spot</td> <td><i>C. veruciformis</i>, <i>C. trifolii</i> and <i>Collitotrichum graminicola</i></td> </tr> <tr> <td>Leaf spot and clump rot</td> <td><i>Fusarium equiseti</i> and <i>F. verticillium</i></td> </tr> <tr> <td>Leaf blight</td> <td><i>Curvularia andropogonia</i> (CLB)</td> </tr> <tr> <td>Leaf blight</td> <td><i>Rhizoctonia solani</i>.</td> </tr> <tr> <td>Grey blight</td> <td><i>Pestalotiopsis magniferae</i></td> </tr> <tr> <td>Smut</td> <td><i>Tolyposporium christensenni</i> and <i>Ustilago andropogonis</i></td> </tr> <tr> <td>Root rot</td> <td><i>Botrydiplodia theobromae</i></td> </tr> </tbody> </table> <p>Setting summer fire on field crop Under rainfed conditions, the field gives a dried appearance during January–May. The dry grass and stubbles is set on fire in May, prior to onset of monsoon. This practice kills insect pests and pathogens and also helps to rejuvenate the plants from the clumps every year.</p>	Disease	Causal organism	Little leaf (malformation of inflorescence)	<i>Balensia sclerotica</i> (Pat) Hohnel	Leaf spot (eye spot)	<i>Helminthosporium saccharii</i> , <i>H. leucostylum</i> , <i>Drechslera victo</i> and <i>D. helm</i>	Leaf spot	<i>Curvularia andropogonia</i> (CLS)	Leaf spot	<i>C. veruciformis</i> , <i>C. trifolii</i> and <i>Collitotrichum graminicola</i>	Leaf spot and clump rot	<i>Fusarium equiseti</i> and <i>F. verticillium</i>	Leaf blight	<i>Curvularia andropogonia</i> (CLB)	Leaf blight	<i>Rhizoctonia solani</i> .	Grey blight	<i>Pestalotiopsis magniferae</i>	Smut	<i>Tolyposporium christensenni</i> and <i>Ustilago andropogonis</i>	Root rot	<i>Botrydiplodia theobromae</i>	   
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Smut	<i>Tolyposporium christensenni</i> and <i>Ustilago andropogonis</i>																							
Root rot	<i>Botrydiplodia theobromae</i>																							

<p> <u>Harvest</u></p>	<p>Leaf/ Herbage harvesting: Harvesting time determines oil yield and quality. Grass is harvested when individual tiller has 4-5 fully opened leaves. First harvest is taken 4-5 months after transplanting. The plants are cut about 10-20 cm above ground level with sickles.</p> <p>adversely affects growth and development of plants ent harvests hence must not be allowed unless seed is targeted. Citral content of oil increases with time es a maximum in 2-5 months depending on the ring 1st year, three cuttings and subsequently 5-6 re obtained per year. Average oil yield is 125-175 In second and subsequent years, 200-250 kg oil/ha produced with good management and use of led variety.</p>	
<p> <u>Processing</u></p>	<p>Oil Distillation</p> <p>Lemongrass oil is collected by steam distillation of the herbage. For good quality oil, steam distillation in stainless steel units is preferred at a steam pressure of 18-32 kg/cm². The grass is distilled either fresh or after wilting. There are three types of distillation</p> <ol style="list-style-type: none"> i. Hydro-distillation: The herb is packed in a vessel and partly filled with water. The vessel is heated by direct fire, steam jacket or immersed steam coil. These units work without external 	 

	<p>boiler and required steam is generated in the distillation still itself.</p> <p>Steam distillation: No water is added to the herbage in the still. Steam generated in an external boiler is introduced into the chamber through steam coils. This method is more efficient.</p> <p>Purification: Insoluble particles in freshly distilled oil can be removed by simple filtration. To remove moisture, anhydrous sodium sulphate @ 2 g/kg oil is added into the oil and kept overnight and then the salt is filtered out. If the colour of the oil gets changed, it can be cleared by steam rectification process.</p> <p>Storage: Small quantity of oil can be easily stored in glass bottles. During storage, oil should be filled up to the brim and containers should be kept in shaded or cool area away from heat and sunlight. The lemongrass oil is chemically reactive. The terpene mixture undergoes complex reactions when exposed to air and sunlight. It is slowly converted into a dark coloured viscous resinous substance on keeping. However, if stored in aluminium or stainless steel vessel without air contact and exposure to water and light, quality of oil is stable for long periods.</p> <p>Products Lemongrass oil: Chemical constituents</p>	
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	<p>East Indian lemongrass oil: 75-85% of aldehydes consisting largely of citral, linalool (1.34%), geraniol (5.00%), citronellol, nerol (2.20%), 1,8 cineole, citronellal (0.37%), linalyl acetate, geranyl acetate (1.95%), α-pinene (0.24%), limonene (2.42%), caryophyllene, β-pinene, β-thujene, myrcene (0.46%), β-ocimene (0.06%), terpenolene (0.05%), methyl heptanone (1.50%) and α-terpineol (0.24%).</p> <p><i>C. citrates</i>: α-pinene (0.13%), β-pinene, delta-3-catrene (0.16%), myrcene (12.75%), dipentene (0.23%), β-phellandrene (0.07%), β-cymene (0.2%), methyl heptanene (2.62%), citronellal (0.73%), β-elemene (1.33%), β-caryophyllene (0.18%), citronellyl acetate (0.96%), geranyl acetate (3.00%), citral b (0.18%), citral a (41.82%), geraniol (1.85%), elemol (1.2%) and β-caryophyllene oxide (0.61%).</p> <p><i>C. pendulus</i> oil: pinene (0.19%), camphene (0.01%), β-pinene (0.16%), car-3-ene (0.04%), myrcene (0.04%), dipentene (0.35%), phellandrene (0.3%), p-cymene (0.36%), methyl heptanone (1.05%), citronellal (0.49%), linalool (3.07%), β-elemene (0.7%), β-caryophyllene (2.15%), citronellyl acetate (0.72%), geraniol acetate (3.58%), citral b (32.27%), citral a (43.29%), geraniol (2.6%), elemol (2.29%) and β-caryophyllene oxide (1.56%).</p>	
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7.4 Analysis of few prominent Websites in Agricultural Sector in Kerala

1. Kissan Kerala(<http://kissankerala.net>)

Merits

1. Linkage to soil testing laboratories – available for Malapuram district only
2. Site is in local language partially
3. PoPs for crops available on site –
4. Planting material availability – dynamic interface available

5. Online Fertilisers Recommendation System – implemented in Malapuram District
6. Krishideepam - Video library for agriculture channel on Youtube
7. Kissan Mobile based information service is available for agriculture

De-merits

a. General

1. Does not cover **Fish farmers** and **livestock** farmers
2. Does not cover all 12 services under NeGP-Agriculture. Covers only 2 -3 services that also partially.
3. Site **does not follow the standards** – W3C compliance, Guidelines for Indian Government websites, etc.
4. Name of the **State Agricultural Department** and **Government of Kerala** is missing.
5. No provision for **collaboration** and knowledge management
6. Some of the **links are not working** for e.g. – Market information
7. At many places latest information is not available on the site
8. **Weather information system** - links for IMD site has been provided instead of providing customized weather information and agro-met advisories for farmers of Kerala,
9. Answers for query **are not direct** and user is directed further to get information. The purpose of SAP is to provide single window solution. It defeats the purpose of having single window system for information. For e.g.

Posted Date	26/5/2012
Question	We want to cultivate bananas in large scale, is any scheme available for banana cultivation, and from where we will get good quality planting materials
Answer	Contact Krishibhavan in your panchayat for scheme details. Contact BFMC, Kazhakkuttam for planting materials. phone 0471 2413739.
Posted by : Hari Shivadas Email : harishivdas@gmail.com Designation : Others Place : Cheppad	

Posted Date	18/5/2012
Question	Sir, Please let me know new varieties of Red Chillies suitable to Andhra Pradesh
Answer	Please contact Agri University in your state for details of varieties suited for cultivation in your region. See http://www.angrau.net/TelephoneDirectory.html for contact details.
Posted by : Anuradha Email : anuradhanird@gmail.com Designation : Farmer Place : Masapet	

b. Specific

Link	Remark
Kerala Agri Directory	Search is tedious
Farming practices	Text book information. Little use of farmer.
Fertilizer recommendation system	Implemented in malappuram district only
Fertilisers and pesticides	Information available only for one district (Trivandrum). No information available for pesticides, though link is for Fertilisers & pesticides
Kisan News	news not updated after 2007
Kisan Krishideepam	no updation of latest information
KISSAN Voice Call	Did not get sample voice call as mentioned on the web page after entering the mobile number. Do not cover all 12 services.
Crop Health decision support system	write up is posted on the website. But the details of how to access it are not available
Information on PoPs	not in searchable format
Schemes	outdated information
Soil and Water	Agricultural map is available only for Trivandrum district
Package of practises, crop information	outdated. Recently updated version is available in the http://www.kau.edu/pop/contents.htm
Discussion Forum	Link is not working
Market information	Link is not working
GIS based weather information	Broken link
Farming Practices	No information is available for Harvest&Processing
GIS based agri advisory	only for Trivandrum district and only cadastral map is available not advisory related and when we click the panchayat, no data is available

e-publication	available up to 2009. (latest publications are available on http://fibkerala.nic.in site)
Pamplates	old pamplates. Latest available on http://fibkerala.nic.in site
Crop Health decision support system	Proxy error - The proxy server received an invalid response from an upstream server. The proxy server could not handle the request GET /KISSAN-CHDSS/CHDSS-Index.html. Reason: Error reading from remote server
New registration	link is not working
Planting materials availability	Dynamic one but the not showing price of date, unit of quantity Data is not the recently updated And not covered all districts like koyttayma, idukki, kasragod, kannur etc

2. <http://www.keralaagriculture.gov.in/>

Merits

1. Department site
2. Site in local language
3. PoPs for crops available on site
4. Information crops and varieties with respect to Kerala available
5. Information on Irrigation available
6. Information on soil types of Kerala available

De-merits

1. Department site for internal use of department, not for farmers
2. Some of the links are not working. PoPs for Tuber, Spices and Condiments
3. Information on PoPs is not in searchable format

3. Agricultural Market Intelligence Centres (<http://amickau.nic.in>)

Merits

1. Provides market intelligence
2. Collaboration for marketing related services under NeGP-Agriculture will be beneficial

De-merits

1. Only few information is in Malayalam

4. Farm Information Bureau (<http://fibkerala.gov.in>)

Merits

1. Covers all three sectors – Agricultural, Livestock and fisheries

2. With its mission and vision and objectives, State Agricultural Portal for Kerala can be designed and developed under guidance of FAB.

De-merits

1. Not available in Malayalam
2. Needs further expansion to cover all services