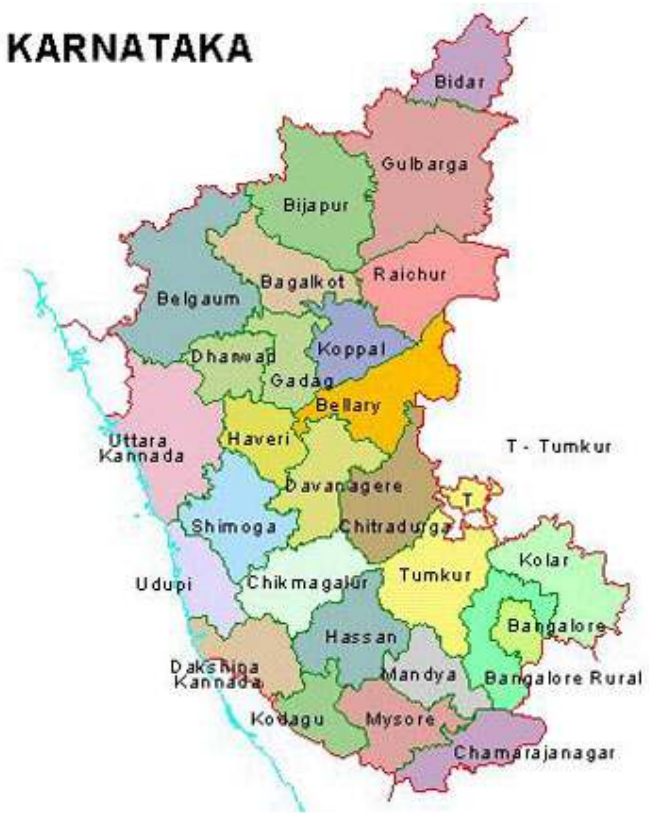
Report of Joint Inspection Team to monitor the implementation of National Horticulture Mission Scheme in Karnataka State



TEAM MEMBERS:

1. Dr. H.V.L. Bathla, Chief Consultant, NHM.
2. Dr. R. Krishna Manohar, Principal Investigator (PFDC), UAS, Bangalore.
3. Director, Directorate of Arecanut and Spice Development, Calicut.
4. Director, Directorate of Cashew & Cocoa Development, Kochi.
5. Dr. H B Lingiaha, Chief Scientific Officer (Horticulture), UAS, Bangalore (Could not participate)
6. Sri. S.T. Hanumaiah, Deputy Director of Horticulture, KSHMA, Lalbagh, Bangalore.

DATES OF VISIT: 2.05.2011 to 7.05.2011

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Karnataka State

Geography

Karnataka is located in the western half of the Deccan plateau. The State extends to about 750 km from north to south and about 400 km from east to west. It has four physiographic regions. Northern Karnataka Plateau (largely includes the Deccan Trap covering districts Bidar, Belgaum, Gulbarga and Bijapur with elevation ranging between 300 to 600 meters), Central Karnataka Plateau (covers districts Chitradurga, Raichur, Chikmagalur, Dharwad, Shimoga and Bellary i.e., Tungabadra region with an elevation between 450 to 700 meters), Southern Karnataka Plateau (includes districts Bangalore, Hassan, Kodagu, Bangalore Rural, Mandya, Mysore, Kolar and Tumkur with elevation of the region is estimated to be 600 to 900 meters) and Karnataka Coastal Region (Western Ghats, edges of the Karnataka Plateau, Uttara Kannada districts and Dakshina Kannada).

Geographical details:

- Area: 191,791 square kilometers,
- Gross Cropped area: 114,503 square kilometers,
- Net cropped area: 98,466 square kilometers,
- Irrigated area: 12,817 square kilometers,
- Area under horticulture: 19.00 lakh ha.
- Location - 74º to 78º East longitude and 11º to 18º North latitude,

- Boundaries – Arabian sea to the West, Goa and Maharashtra in the North, Tamil Nadu and Kerala in the South and Andhra Pradesh to the East,
- Population -6.10 cores and with density of 275 per km² (2011 census),
- Rate of Literacy – 75%,
- Number of Districts – 30.

Climate

Karnataka State enjoys a salubrious climate throughout the year. Weather in the state is however dynamic and changes from place to place owing to its altitude, topography and its distance from the sea. It will be influenced by four major seasons such as winter season (December to February), the summer season (March to May), monsoon season (June to September), and post-monsoon season (October to November).

The southwest monsoon accounts for almost 80% of the rainfall the state receives. The annual rainfall across the state ranges from low 50 to 250 cm. The districts of Bijapur, Raichur, Bellary and Southern half of Gulbarga experience the lowest rainfall ranging from 50 to 60 cm, while the west coast

Soil and irrigation facility

Depending on the agricultural capability of the soil, the soil types in the state are divided into six types viz., red, lateritic, black, alluvial, forest and coastal soils.

Karnataka accounts for about 6% of the country's surface water resources. Around 60% of this is provided by the west flowing rivers, while the remaining comes from the east flowing rivers. There are 7 river basins all formed by the Godavari, Cauvery, Krishna, west-flowing rivers, South Pennar, and Palar.

Potential of Horticulture in Karnataka

Horticulture sector in Karnataka at a glance

Karnataka is regarded as the “Cafeteria of Horticultural Crops” given the suitability for cultivation of various horticultural crops. The current area and

production of horticulture crops is estimated to be around 18.9 lakh hectares and 148 lakh tons, respectively, with an average productivity of about 7.8 tons per hectare. There is a big scope to promote area under crops and output mainly focusing on yield levels. Though the horticulture sector in the state has witnessed a phenomenal growth in the last five decades, there are abundant opportunities for further growth, especially in areas like productivity improvement, quality enhancement, hi-tech horticulture, protected cultivation, precision farming, etc. Horticulture sector is an important source of livelihood for as many as 12 lakh farming households in the state.

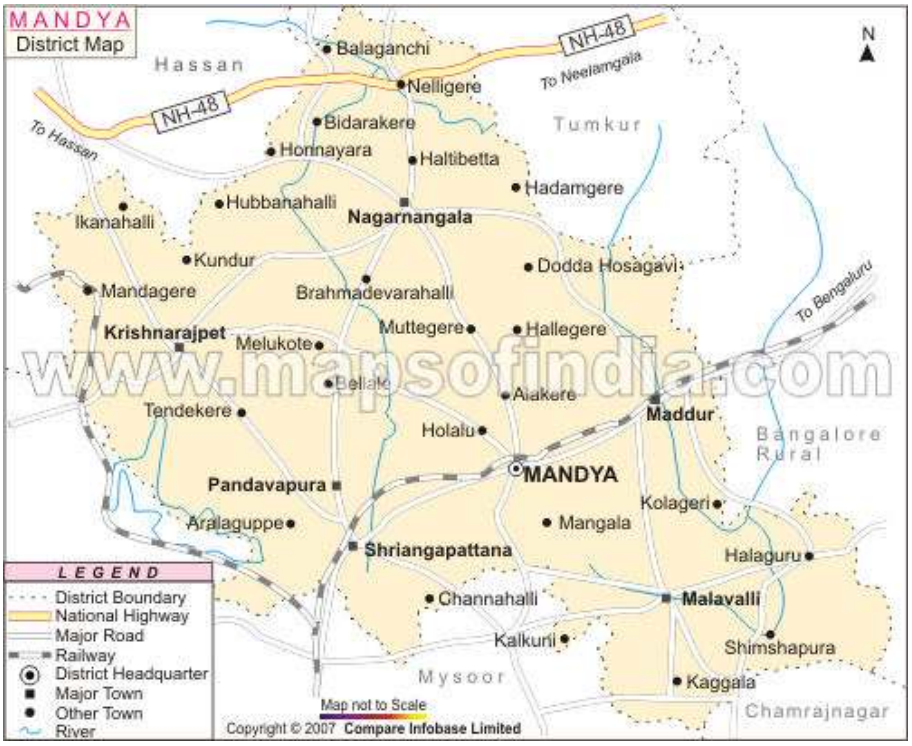
Area and production of major horticultural crops in Karnataka

(fig. in '000 ha/ tons)

Year	Fruits		Vegetables		Spices		Plantation		Flowers		Aromatic	
	Area	Prodn	Area	Prodn	Area	Prodn	Area	Prodn	Area	Prodn	Area	Prodn
2004-05	230.8	3339.9	234.0	2466.3	216.3	458.5	759	495.0	16.9	138.7	1.2	4.8
2005-06	233.4	3515.6	267.4	4638.0	196.9	472.4	698	407.0	19.0	115.5	1.2	14.7
2006-07	252.2	3786.6	263.9	4719.2	210.5	461.2	724	450.0	21.4	182.2	0.8	8.3
2007-08	259.8	3975.9	271.8	4955.2	216.8	453.7	746	425.0	22.0	191.3	0.9	8.7
2008-09	289.5	4482.0	257.6	4098.1	207.3	517.0	721	412.0	27.0	199.8	1.7	15.0
2009-10	360.2	5962.7	436.9	7063.0	266.4	1097.1	805	442.0	26.83	195.5	1.5	16.17
Average	**306.7**	**4891.4**	**347.9**	**5619.2**	**237.95**	**784.85**	**742.16**	**438.5**	**24.06**	**180.5**	**1.35**	**13.24**

Karnataka state has an equal distribution of key horticultural crops such as major Fruits and Vegetables (F&Vs) with the area under the crop ranging between 2.5 to 3.6 lakhs ha. The area under major spices is also significant at about 2.37 lakhs ha. followed by flowers and aromatic crops with about 0.24 and 0.13 lakh ha respectively. In terms of output, major F&Vs account about 48.25 and 56.19 lakh tons, respectively.

DISTRICT : MANDAYA



Mandya is one of the important agrarian district with an geographical area of 4.98 lakh hectares, out of which 2.30185 lakh ha is available for cultivation. 48% of the cultivable area is comes under irrigation. Sugarcane is the main commercial crop of the district.

32% (72251 ha) of the cultivable area is occupied by Horicultural crops. The main horticultural crops of the district are Coconut (56%), Mango (8%), Sapota(2%), Banana (6%). Vegetable crops are grown in 19% of the horticultural area. Spice crops occupy 3.25% followed by Flower crops which occupies 4% of the horticulture area.

Sl.No	Name of the crop	Area (ha)	Production (Ton)	Productivity (Ton/ha)
1.	Fruit crops	12482	236844	18.97
2.	Vegetable crops	13522	249862	18.48
3.	Spice Crops	2354	12041	5.11
4.	Plantation crops	42511	4180	0
5.	Commercial flowers	1355	13664	10.08
6.	Medicinal crops	8.50	22.60	2.66
7.	Aromatic crops	19	115	6.05
	Total	***72251.50***	***516728.60***	

Rain and Weather conditions:

Annual rainfall of the district is 700mm which spreads over January to December. July(123mm) and October (169.5mm) months are the maximum rainfall receiving months. Weather and soil conditions of the district is very much suited for growing horticulture crops. Now a days farmers are inclining towards horticultural crops for getting more and sustainable income.

Details of Sourcewise irrigation

Sl.No	Source Details	Area (ha)
1.	Irrigation Canals	111046
2.	Tube wells	12165
3.	Tanks	12790
4.	Wells	12341
5.	Lift Irrigation	529
6.	Other Sources	1604
	Total	150475

Details of Basic Infrastructures available in the District

S. No	Details	Mandya	Maddur	Malavalli	S.R. Patna	P.Pura	Nagamangala	K.R.Pet
1.	Markets	APMC, 6 Farmers markets	APMC, Tender coconut market	APMC, Municipality market	Local market	Local market	APMC, Farmers markets	Local market
2.	Cold Storage	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3.	Processing Units	Nil	Cocogel, Pickles units	Nil	Nil	Nil	Nil	Nil
4.	Godowns	1	Nil	Nil	Nil	Nil	APMC godown	Nil
5.	Training Centres	Govt-1 NGO-1	Nil	NGO-1	Nil	Nil	Nil	Nil
6.	Irrigation facilities	Canal, Tube well, Open well	Canal, Tube well, Open well	Canal, Tube well, Open well	Canal, Tube well, Open well	Canal, Tube well,	Tube well	Tube well, Hemavathi Canal

Yearwise Targets and Achievements under NHM scheme since Inception;

S.No	Year	Physical		Financial	
		Target	Achivement	Target	Achivement
1.	2005-06	5028	2883	112.305	27.798
2.	2006-07				
3.	2007-08	2514.9	25466.095	69.1404	142.85230
4.	2008-09	1640	1845	113.78	26.41089
5.	2009-10	9728	7829	248.284	201.954
6.	2010-11	4544	4571	131.75	126.1597

Silent Features of the components implemented under NHM in the District;

1. Vermicompost & Biodigester Units;
   For promoting organic farming in horitultural crops construction of vermicompost unit or Bio digester unit has gained importance in the farming community of the district. With the available farm wastes farmers are going for production of vermicompost. During 2009-10 215 Units have been

established throughout the district. During 2010-11 also farmers have got assistance for construction of 55 Units under NHM scheme.

2. Integrated Pest Management;
   For minimizing chemical usage in horticultural crop production, Integrated Pest Management has gained lot of importance in the district. By adopting Integrated Pest Management practices like usage of Pheramone Traps for Mango fruit weevil, Red Palm Weevil, Rhinocerous Beetle has been effectively contolled. Hence inputs like Biofertilizers, Neem based chemicals are being widely used by the farmers.

3. Onion Storage Units:
   As though Mandya district is predominantly a tradition area for vegetable production now a days farmers are switching on to Onion crop which is high income generating crop for the farmers. Deparatment has given subsidy for Onion Storage structure construction during the year 2010-11 under NHM.

Beneficiary No. 1

Project Category (PHM Market/Processing)	: *Post Harvest Management*
Name of Project	: Onion Storage Unit
Year of implementation	: 2010-11
Project period	: 2010-11
Name of Implementing Agency	:Department of Horticulture, Mandya
Location of Project	:Bommanahalli, Mandya Taluk

Total Project Cost	: 1.94 Lakhs
Amount Released by DAC	: 0.50 Lakhs
Expenditure incurred	: 1.94 Lakhs
Status	: Working in good condition
Capacity of Unit	: 70 tonnes
Commodity	: onion
Condition of infrastructure	: structure of local model for Storing onion in good condition
Whether Board displayed	: Yes
Whether funds disbursed to Agency	:Yes

Beneficiary No.2

1.Name and address of Beneficiary whose field visited : Sri. Muthuraj s/o Kurikadaiah, Toppanahalli, Kasaba Hobli, Maddur Taluk Mandya District, Karnataka.

2. Total land available with the beneficiary (ha) : 1.33 Acres

3.Crop Cluster under which covered : Mango

4. Name and variety of crop planted : Badami

5. Sources of planting material : Private Nursery

6. Number of plants planted : 50

7. Date of planting : 08.07.2009

8.Number of plants which survived (also indicate percentage Survival) : The area is under first year maintenance. 4 plants which died during the plating year were replaced by new

healthy plants during the current year

9. Total amount of subsidy assistance due to the beneficiary as (Rs.) : Second year maintenance amount Rs.1057 to be given during 2011-12

10. Amount paid and date of payment

For New plantation 2009-10 :: Rs. 3819

Date of payment : : 29.03.2010

Ist year maintenance-2010-11 :: Rs.1057

Date of Payment: : 30.07.2010

11. Mode of payment : NEFT

12. Source of Irrigation Water : Area is totally Rainfed. During Summer season Irrigation is provided On hire basis through tankers from nearby water source

13.Whether Drip/Sprinkler system in use : Nil

14. Other inputs provided: Fresh planting Ist Year main

Neemcake	53 Kg
Trichoderma	2 Kg
City compost	78 Kg

15. Whether assistance availed for Organic Farming : No

16. If so, area covered

17. Assistance availed

18. Available marketing facility for the crop : Local market and near by District Horticultural Producers Marketting Cooperative society .

19. Other infrastructure available in the vicinity

20. General upkeep of the plot : Good

21. Any other relevant observation by the JIT.

Beneficiary No.3

1. Name and address of Beneficiary whose field visited : Sri. Ravi S/o Siddaiah, Toppanahalli, Kasaba Hobli, Maddur Taluk Mandya District, Karnataka

2. Total land available with the beneficiary (ha) : 2.20 Acres

3.Crop Cluster under which covered : Mango

4. Name and variety of crop planted : Badami

5. Sources of planting material : Private Nursery

6. Number of plants planted : 100

7. Date of planting : 10.07.2009

8.Number of plants which survived(also indicate percentage Survival) : The area is under first year maintenance. Hence 6 plants which died during the plating year were replaced by new healthy plants during the current year.

9. Total amount of subsidy assistance due to the beneficiary as (Rs.) : Second year maintenance amount Rs. 1800 to be given during 2011-12

10. Amount paid and date of payment :
For New plantation 2009-10 : Rs. 6500
Date of payment : 29.03.2010
Ist year maintenance-2010-11 : Rs.1800
Date of Payment: 30.07.2010

11. Mode of payment : NEFT

12. Source of Irrigation Water : Area is totally Rainfed. During Summer season Irrigation is provided On hire basis through tankers from nearby water source

13. Whether Drip/Sprinkler system in use : Nil

14. Other inputs provided:

Fresh planting	Ist Year main
Neemcake	100 Kg
Trichoderma	3 Kg
City compost	131 Kg

15. Whether assistance availed for Organic Farming : No

16. If so, area covered:

17. Assistance availed :

18. Available marketing facility for the crop : Local market and near by District Horticultural Producers Marketting Cooperative society .

19. Other infrastructure available in the vicinity :

20. General upkeep of the plot : Good

21. Any other relevant observation by the JIT.:

Beneficiary No.4

1. Name and address of Beneficiary whose field visited: Sri. Kempaiah S/o Honnaiah, Toppanahalli, Kasaba Hobli, Maddur Taluk Mandya District, Karnataka
2. Total land available with the beneficiary (ha) : 2.00 Acres
3. Crop Cluster under which covered : Mango
4. Name and variety of crop planted : Badami
5. Sources of planting material : Private Nursery
6. Number of plants planted : 40
7. Date of planting : 10.12.2009.
8. .Number of plants which survived(also indicate percentage Survival) : 40 lants. No plants died.

9. Total amount of subsidy assistance due to the beneficiary as (Rs.) : Second year maintenance amount Rs. 675 to be given during 2011-12

10. Amount paid and date of payment:

For New plantation 2009-10 : Rs. 2437
Date of payment : 29.03.2010
Ist year maintenance-2010-11 : Rs. 675
Date of Payment: 30.07.2010

11. Mode of payment : NEFT

12. Source of Irrigation Water : Area is totally Rainfed. During Summer season Irrigation is provided by the nearby pond where Checkdam is constructed by Watershed department.

13. Whether Drip/Sprinkler system in use : Nil

14. Other inputs provided:

Fresh planting	Ist Year main
Neemcake	34 Kg
Trichoderma	1 Kg
City compost	49 Kg

15. Whether assistance availed for Organic Farming : No

16. If so, area covered:

17. Assistance availed :

18. Available marketing facility for the crop : Local market and near by District Horticultural Producers Marketting Cooperative society

19. Other infrastructure available in the vicinity:

20. General upkeep of the plot : Good

21. Any other relevant observation by the JIT.:

Observations:-

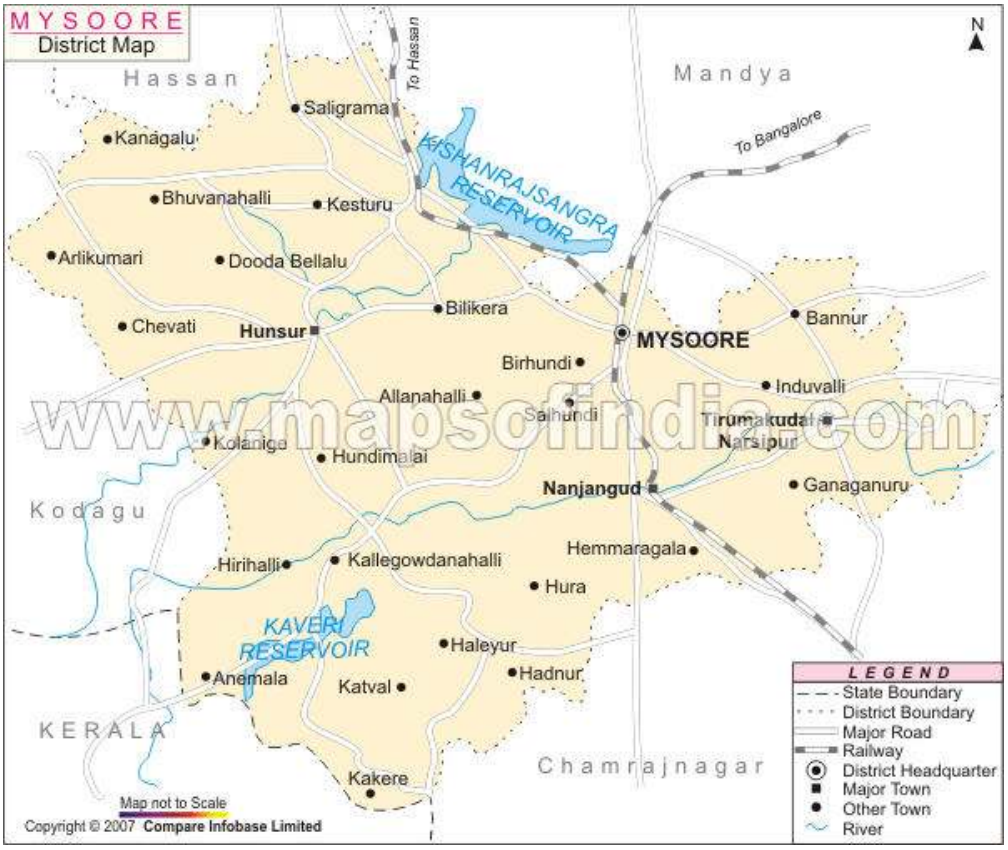
(i) In Thoppanahalli Village, for the AEP for Mango no water is available and farmers are bringing water from far away places by tankers on payment basis.

(ii) The procedure being followed for storage of Rose Onion is not scientific and cannot protect the produce in different climatic vagaries and also for longer time.

Recommendations:-

(i) Availability of water source on the field to be ensured while selection of farmers for AEP.

DISTRICT : MYSORE



INTRODUCTION

Mysore District is situated in Southern part of Karnataka, having an area of 6854 sq.K.m. The District is situated at latitude of 11º 7' to 12º 39' N and at longitude of 75º 54' to 77º 07' East and at an altitude of 769 mtr. MSL. Mysore District comprises of 7 taluks and 33 Hoblies. The Population of the district is 26,41,027 as per 2001 Census. 63% of the total population (16,58,899) lives in Rural areas. District Literacy is around 55%. Total Geographical area is 676382 ha. out of which 62851 ha. are under forest, with a sown area % of 555622 ha. out of which area under Horticulture is 50643 ha. 49 % of the net sown area is irrigated. 51% is rainfed. There are 371042 farming families of which 244595 are marginal and 85021 are small farmers. 89% of farmers are small & marginal. Main occupation of the district is Agriculture, Horticulture and Animal Husbandry.

There is only one Agroclimatic zone in the entire district.viz. " Southern Dry zone". The annual normal rainfall in the district is 782 mm. And the annual actual rainfall is 747 mm. With 53 normal Rainy days. Soils are Red loamy soils, Black soils, Ph of the district is generally acidic in nature. Soils are rich in potassium but deficient in Zinc and Boran.

Geography and Climate

Mysore district is located at the distance of 139 km from Bangalore. The district is situated at 769.05 from MSL. The details of agro climatic situation of Mysore district is as follows.:

SL No	Agroclimatic Situation	Hobli	Taluk
1	Predominently rainfed areas	1)Kasaba, Hebbal,	1)K.R.Nagara

		Hosa Agrahara	
		2)Jayapura, Yelawala	2)Mysore
		3)Kasaba, Doddakavalandhey, Hullahalli, Nanjangud	3)Nanjangud
		4)Sosale	T.Narasipura
2	Predominently irrigated areas	1)Saligrama, Mirle, Chunchanakatte	K.R.Nagara
		2)Kasaba, Varuna, Chikkaiahnachatra	Mysore
		3)Bilikere, Kasaba, Hunsur	Hunsur
		4)Bannur, Mugur, Talakad	T.Narasipura
3	Less rainfall . shallow soils	1)Hampapura	H.D.Kote
		2)Bilikere, Gowdagere	Hunsur
		3)Ravandur, Bettadapura	Periyapatna
4	Heavy rainfall areas with deep soil	1)Kasaba, Saraguru. Antharasanthe	H.D.Kote
		2)Kasaba, Hanagodu	Hunsur
		3)Kasaba, Harnahalli	Periyapatna

POTENTIAL OF HORTICULTURE

The total geographical area is 676382 ha. Net sown area is 358904 ha. In an area of 50643 ha. Horticulture crops are grown in Mysore district. The detail of Horticulture Crops area is as follows.

SL No	Crops	Area (in ha)	Production (in tones)
1	Fruits	8984.00	148101.75
2	Vegetables	6019.00	116855.00
3	Spices	8088.00	138294.00
4	Plantation crops	26612.00	7320.40
5	Commercial flowers	933.00	5722.00
6	Medicinal plants	7.00	56.00
7	Aromatic plants	10.00	150.00
	Total	***50643.00***	***416349.34***

Around 14.11% of Net sown area is under different Horticulture crops.

During 2006-07 the area under Horticulture crops was 33228 ha. The present area under Horticulture Crops has been increased to 50643 ha. This shows that an area of 17415 ha. (35%) has been increased during last 4 years. In NHM area expansion programs subsidy has been extended to 7806 ha. Rs.884 laks.

Componentwise progress achieved under NHM

During 2010-2011

Physical in Ha. / No.
Financial in Rs. In lakh

Components	Physical Achievement	Financial Achievement
Small Nursery (Public Sector)	1	6.25
Seed Production (Private Sector)	2	0.50
Area Expansion of Fruits	341.2	63.44
Area Expansion of Flowers	101.78	14.37
Area expansion of spice crops	300	37.50
Adoption of Organic farming	300	9.00
Organic Farming Certification	6	9.00
Vermicompost / Bio -digester	86	20.77
Protected cultivation	9	20.89
INM	1020	10.20
IPM	600	6.00
Pollination suport through Bee Keeping	436	3.27
Farm Pond	5	2.40
Horticulture Mechanization (Tractors)	24	18.00
Publicity & propaganda(Krushi mela & Dassera Flower show	1	4.00
HRD (Training or exposure visit)	493	2.05
Total	**3725.98**	**227.639**

Beneficiary No.-1

WATER RESOURCES

Name of Project : Farm Pond

Year of Implementation :2010-11

Project Period : ----

Name of Implementing Agency :DDH , MYSORE

Location of Project :ArakereKoppal, K.R.Nagar Taluk, Mysore district

Total Project cost : Rs 1.20 lakhs

Amount Released by DEPT. :Rs.0.60 lakh

Expenditure incurred :Rs. 1.20 lakhs

Current status of project

Capacity : 1200 m3

Commond Area :Rain water & borewell irrigation facility

Whether linked with new plantation or old plantations : old

Whether Funds disbursed : Yes

Beneficiary No.-2

(1) Nursery Vegetable seed production / Seed Infrastructure

Name of Project : Tubular Structure Poly house

Year of Implementation : 2010-11

Project Period : ---

Name of Implementing Agency : DDH, MYSORE

Location of Project :Shettynayakanahalli, Yelawala, Mysore

Total Project cost :Rs. 9.55 lakhs

Amount Released by DAC :Rs.4.675 lakhs

Expenditure incurred :Rs. 9.55 lakhs

Beneficiary No.-3

Name of Nursery and crops for plants are produced :Tubular structure poly house, Hybrid which Vegetable seedlings production

Name of crops for which seeds produced : Tomato, Chilly, Brinjal, Cauliflower, Cabbage, Watermelon, seedlings

Quantity produced : 18 lakhs No. of plants

Quantity sold :18 lakhs

Rate :Rs. 0.35/plant

Amount realizes through sale :Rs.6.30 lakhs

Whether HMNEH Board displayed :Yes

Beneficiary No. -4

(1) Nursery Vegetable seed production / Seed Infrastructure

Name of Project	: Wooden Structure Shadenet
Year of Implementation	: 2010-11
Project Period	: ---
Name of Implementing Agency	: DDH, MYSORE
Location of Project	:Arakere, K.R.Nagar Tq. Mysore district
Total Project cost	:Rs. 5.45 lakhs
Amount Released by DEPT.	:Rs.1.64 lakhs
Expenditure incurred	:Rs. 5.45 lakhs

Beneficiary No.-5

Name of Nursery and crops for	:Wooden structure Shadenet, Hybrid which plants are produced Vegetable seedlings production
Name of crops for which seeds	: Tomato, Chilly, Brinjal, Cauliflower, produced Cabbage, Watermelon, seedlings
Quantity produced	: 5 lakhs No. of plants
Quantity sold	:5 lakhs
Rate	:Rs. 0.35/plant
Amount realizes through sale	:Rs.1.75 lakhs
Whether HMNEH Board displayed	:Yes

Beneficiary No. -6

Model Nursery

Name of Project	: Establishing composite Model Nursery under NHM
Year of Implementation	: 2009-10
Project Period	: 3 years

Name of Implementing Agency : University of Agricultural sciences, B.lore

Location of Project :Organic farming agricultural research station, Naganahalli, Mysore-3

Total Project cost :Rs. 18.00 lakhs

Amount Released by DEPT. :Rs.18.00 lakhs

Expenditure incurred :Rs. 12.20lakhs

Status of project : Continued for 3 years

Name of Nursery and crops for which

plants are produced :Composite Model Nursery

The following grafts are produced and yet to be sold

Mango : 35 No.

Sapota : 60 No.

Fig : 39 No.

Seedless lime : 60 No. seedlings

The following vegetable seedlings are raised and sold to be farmers

Tomato seedlings : 42400 No.s @ Rs. 0.20/seedling

Pole beans : 8000 No.s @ Rs. 0.15/seedling

Marigold : 300 No.s @ Rs. 0.30/seedling

Chilli : 4400 No.s @ Rs. 0.25/seedling

Amount realizes through sale - Rs. 10790-00

Whether HMNEH Board displayed : Yes

Beneficiary No.-7

Name of Project : Vegetable wholesale Market

Year of Implementation : 2007-08

Project Period : --

Name of Implementing Agency :A.P.M.C, Mysore

Location of Project :APMC, Bandipalya, Mysore

Total Project cost :Rs.1020.00 lakhs

Amount Released by DEPT. :Rs 255.00 lakhs

Expenditure incurred :Rs. 1020.00 lakhs

Status of project

Size of market in terms of area :43 acres

Facilities created :7 auction platform,144 stalls, information center, farmersrest house,water supply, roads,streetlights

Commodities sold ;Vegetables & Fruits

Approachability :well connected to NH 219 & Mysore airport

Condition of market : Good

Whether funds disbursed to Agency :Yes

Beneficiary No. -8

Name of Project : Hi-tech flower market

Year of Implementation : 2009-10

Project Period : --

Name of Implementing Agency :A.P.M.C, Mysore

Location of Project :APMC, Bandipalya, Mysore

Total Project cost :Rs.340 lakhs

Amount Released by DEPT. :Rs 85.00 lakhs

Expenditure incurred :Rs. 340 lakhs

Status of project

Size of market in terms of area :1444 m2

Facilities created :Constrution work is under progress(cold storage cum air conditioned auction hall, rate display system)

Commodities sold : Flowers(tuberose,chrysanthemum,rose, jasmine, etc.)

Approachability : well connected to NH 219 & Mysore airport

Condition of market

Whether funds disbursed to Agency : Yes

Beneficiary No. -9

Name of Project	:Vermi Compost Unit
Year of Implementation	:2010-11
Project Period	:-------
Name of Implementing Agency	:DDH, Mysore
Location of Project	:Devagally, Jaipura, Mysore (Tq)
Total Project cost	:Rs. 0.30 lakh
Amount Released by DEPT.	:Rs. 0.15 lakh
Expenditure incurred	:Rs. 0.30 lakh
Status	
Crops covered	: Papaya, Coconut, Mango, Vegetable flower, crops
No. of farmers involved	: 1
Whether funds disbursed	: Yes

Beneficiary No.-10

Name of Project	:Bee Keeping (colony + Hives)
Year of Implementation	:2010-11
Project Period	:-------
Name of Implementing Agency	:DDH, Mysore
Location of Project	:Devagally, Jaipura, Mysore (Tq)
Total Project cost	:Rs. 0.75 lakh

Amount Released by DEPT. :Rs. 0.375 lakh

Expenditure incurred :Rs. 0.75 lakh

Status

Crops covered : Papaya, Coconut, Mango, Vegetable & flower

No. of farmers involved : 1

Whether funds disbursed : Yes

Beneficiary No. 11

Name of Project :Tractor subsidy

Year of Implementation :2010-11

Project Period :-------

Name of Implementing Agency :DDH, Mysore

Location of Project :Baradanapura, Mysore (Tq)

Total Project cost :Rs. 4.77 lakh

Amount Released by DEPT. :Rs. 0.75 lakh

Expenditure incurred :Rs. 4.77 lakh

Status

Crops covered : Mango, Sapota, Coconut

Land details : 14.05 acres

Aim of the project :land ploughing & transportation

Date of registration :06-04-2010

Registration No. : K.A.09 T6125

Whether funds disbursed : Yes

Whether board displayed : Yes

Beneficiary No.12

Name of Project :Tractor subsidy

Year of Implementation :2010-11

Project Period :-------

Name of Implementing Agency	:DDH, Mysore
Location of Project	:Sambravalli, K.R.Nagar (Tq)
Total Project cost	:Rs. 5.32 lakh
Amount Released by DEPT.	:Rs. 0.75 lakh
Expenditure incurred	:Rs. 5.32 lakh
Status	
Crops covered	: Arecanut, Coconut, Banana, Papaya
Land details	: 10.25 acres
Aim of the project	:land ploughing & transportation
Date of registration	:13-10-2010
Registration No.	: K.A.45 T5324
Whether funds disbursed	: Yes
Whether board displayed	: Yes

Observations:-

(i) In the APMC market supported under NHM there is a facility for open auction platform where farmers can directly auction their Horticulture produce.

(ii) There is growing interest among farmers for bee keeping since it helps enhancing the pollination resulting in increased yield in horticulture crops like Coconut, Guava, Papaya, Mango & also vegetable crops. In view of this, there is a need for imparting training on bee keeping.

(iii) In view of shortage of labour for horticulture operations the horticulture mechanization support under NHM is very useful.

(iv) The poly-house nursery for vegetable seedlings supported under NHM private sector is producing seedlings for the farmers on demand basis and there is lot of demand for this.

(v) The performance of the plant health clinic sanctioned to the Organic Farming Research Station , Mysore under UAS Bangalore is not satisfactory.

(vi) Composite Model Nursery supported under NHM to Organic Farming Research Station, Mysore under UAS Bangalore has developed infrastructure for production of planting material. However, the large scale production has yet to commence.

(vii) The Department Of Horticulture Nursery for the fruit crops was producing quality planting material.

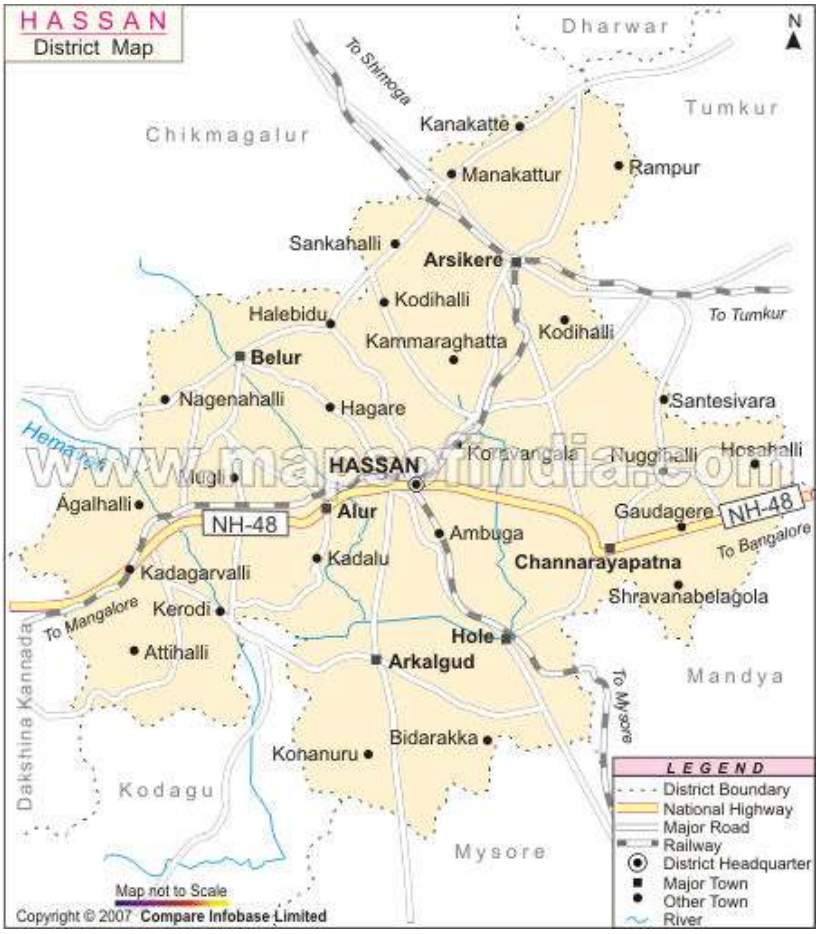
Recommendations:-

(i) The Plant Health Clinic requires display of major disease / pest symptoms with suitable control measures. Records of the farmers visiting Plant Health Clinic as well as results of analysis and feedback from the farmers need to be maintained.

(ii) Production of planting material as per the targets fixed to be commenced without further delay.

(iii) There is a need to have close coordination of the Center with the Department Of Horticulture (DOH). The DOH may monitor the activities in this regard from time to time.

DISTRICT : HASSAN



Background Information

The area of Hassan district is about 6.814 sq kms, located in the southwestern part of Karnataka ruled by Hoysalas. The earlier name of Hassan was Simhasanapura. Hassan is popularly known as “Poor man’s Ooty”. Hassan is a picturesque town in the heart of Malnad, with a pleasant climate. Hassan district comprises of 8 talukas (Alur, Arkulgud, Arsikere, Belur, Channarayapatana, Hassan, Holenarsipura and Sakleshpura) surrounded by Chikmaglur, Tumkur,

Kodagu, Mysore, Mandya, Dakshina Kannada districts. This quiet and peaceful town is a convenient base to visit ruins sculptures and monuments at the ancient cities of Sharvanabelogala, Belur and Halebeedu.

Hassan is well connected by road and rail to all cities of State. In near future Hassan is expecting Airport too. Hassan is also houses the Master Control Facility (MCF) of India's space programme. Important rivers of districts are Cauvery, Hemavathi and Yagachi. According to 2001 census, the population of the district is 1,721,669, out of which 859,086 are males (49.90%) and 862,583 are female (50.01%). The literacy percentage of the district is 60.67% out of which 69 percent are males and 52.31 percent are females.

During 2010-11 the total horticultural area of the district is 1.49 lakhs hectares (excluding Coffee area). Which comprises 37% of the total cultivable area of the district. Among the fruit corps, Mango- 2678 hectares, Sapota-920 hectares, Banana-3630 hectares, Citrus- 635 hectares, Guava-347 hectares. In vegetable crops, Potato-18265 hectares, Tomato-1366 hectares, Brinjol-766 hectares, Onion-90 hectares, Cole Crops-1206 hectares, Gourds-1152 hectares. In Spices crops Pepper-3049 hectares, Cardammom-7700 hectares, Ginger-34005 hectares. Among Plantation crops, Coconut-62256 hectares, Arecanut-4110 hectares, Flower crops 983 hectares.

HASSAN DISTRICT

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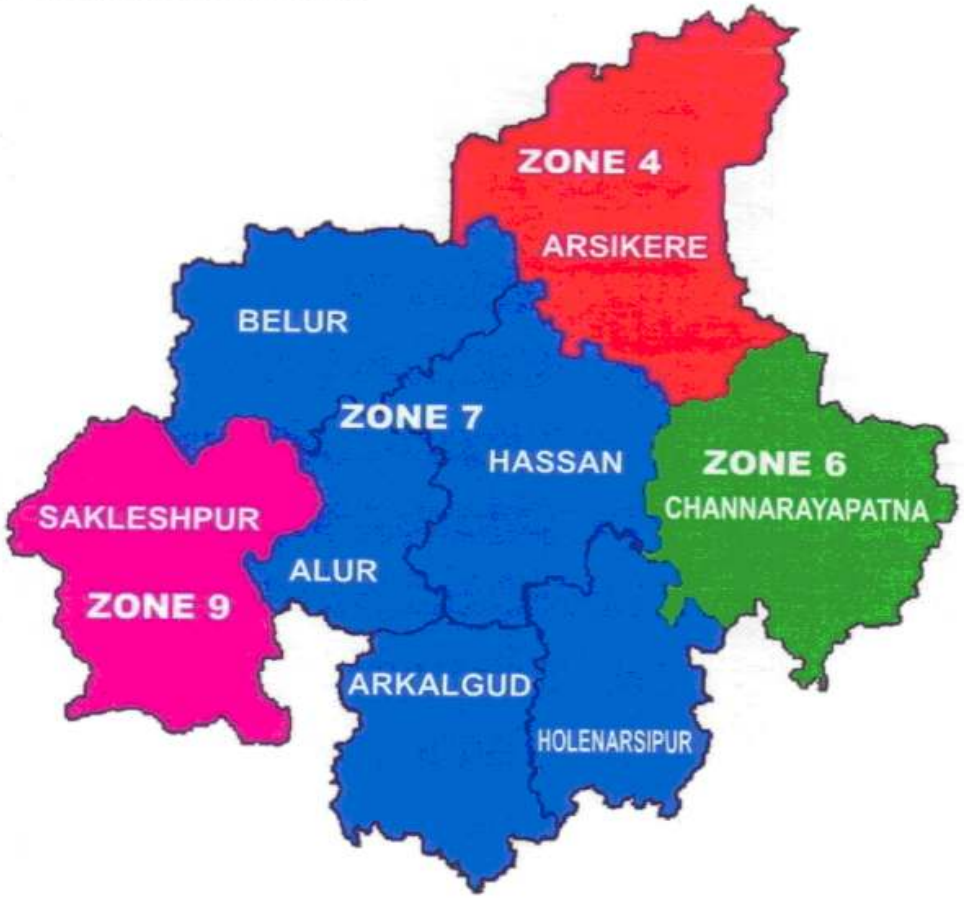
MAP SHOWING AGRICULTURE ZONES



Zone No.	Agro-climatic Zone
4	Central Dry Zone
6	Southern Dry Zone
7	Southern Transition Zone
9	Hilly Zone

Establishment of New Gardens :

Hassan district is well suited for the cultivation of potential fruit crop like Mango, Sapota, Banana. There is lot of demand from the farmers of Channarayapatna, Arasikere, Belur, Hassan and Arakalagud talukas. Identified the cluster to improve the productivity and quality of there potential crops with assistance under National Horticulture Mission. Quality planting material to be produced and made available to the farmers in departmental farms, private & public nurseries. For 2011-2012 the area proposed under different horticulture crops are as follows Mango-130 ha, Sapota-125 ha, Banana (Suckers) – 70 ha, Banana (Tissue culture)-190 ha, Loose flowers – 50 ha respectively.

Protected Cultivation :

In order to utilize the land judiciously & to get maximum return from unit land & to produce more number of quality planting materials, in 2011-2012 annual action plan proposed Rs.67.48lakhs for the construction of different types of Shade Net & Green House structures maximum structures were proposed in Belur, Arsikere, Sakaleshpura, Channarayapatana & Holenarasipura taluk of Hassan District

Creation of water resources.:

With a view to create water resources structure in 2011-2012 Annual action plan proposed Rs.32.20lakhs. Proposed in Alur, Belur, Chennarayapatna and Hassan taluks.

Promotion of INM/IPM

In our district 18% of the funds in the action plan is allocated for integrated pest management and integrated nutrient management with a view to ameliorate soil health, increase the fertility and nutrient status of the soil, which provides the micro-nutrients deficient in the soil. Following micro-nutrient deficiencies are found in the Hassan District is as follows. 70%-79% of zinc deficiency recorded in the Malnad regions like Alur, Sakaleshpur, Belur and part of Hassan talukas, and hence distribution of $ZnSo_4$ to the farmers of there talukas under National Horticulture Mission is needful. Major Horticulture crops grown in these areas are Ginger, Pepper, Banana, Potato, Mango, Sapota and Areca.

The soils of Arasikere, Channarayapatna, Holenarasipur talukas 30%-35% deficiency in Boron the major horticulture crops like Coconut, Areca, Banana, Mango, Sapota and vegetable crops are grown.

Soils of Hassan are of 3 types, red laterite, black cotton soils. Most of Hassan is covered by red to brown sandy loams. In which crops are extensively cultivated by applying organic and inorganic fertilizers. These soils are neutral to slightly acidic with PH 5.9. Hence application of lime is also taken up under INM. To increase the fertility status of soil distribution of green manure seeds, organic manures Bio-fertilizers, Micro-nutrients especially in the talukas like Arasikere, Channarayapatna, Arakalagud and Holenarasipur.

Adoption of Organic farming:

In Hassan district most of the farmers are coming forward for adopting organic farming and Bio-digester units. Hence 8% of the total funds outlaid for organic forming Vermi-compost/Bio-digester units.

Adoption of organic farming improves the productivity and also helps in management of pest and diseases.

Pollination support through bee-keeping:

Alur, Sakaleshpur and Belur talukas of Hassan district fall under Malnad regions where horticulture crops like Areca, Pepper, Banana and Cardamom is grown extensively. Assistance under NHM for pollination support through bee keeping helped farmers of this region where 60% pollination in cardamom is enhanced through honey bees which is interns has increased yield and also benefited by farmers. A Beekeepers society is also established in Sakaleshpur taluk where bee colonies and boxes were sold. In 2011-2012 Annual action plan 300 units each in Bee colonies and Bee hives were proposed.

Beneficiary No.1

Name of Project	: Community Farm Pond
Year of Implementation	: 2010-11
Project Period	: 5 years
Name of the Implementing Agency	: Rangaswamy
Location of Project	: Byadarahalli, Kattaya, Hassan Taluk,

Hassan District

Total Project Cost : 3.75 Lakhs

Amount Released by DAC : 1.56 Lakhs

Expenditure Incurred : 1.56 Lakhs

Current Status of Project

- Capacity : 2352 Cubic Meters
- Command Area : 1 Ha
- Whether linked with new plantation of old plantations : New Plantation (Mango, Sapota, Banana & Vegetable crops)
- Whether Funds disbursed : No
- Rate :
- Amount Realizes through sale :
- Whether HMNEH Board Displayed :

Beneficiary No. 2

(1) Nursery/Vegetable Seed Production/Seed Infrastructure

Name of Project : Model Nursery (Medicinal Plants)

Year of Implementation : 2007-08

Project Period : 3 Years

Name of the Implementing Agency : Agriculture College, Karekere

Location of Project : Agriculture College, Karekere, Hassan

Total Project Cost : 18.00 Lakhs

Amount Released by DAC : 18.00 Lakhs

Expenditure Incurred : 18.00 Lakhs

Beneficiary No. - 3

- Name of Nursery and crops for which plants are produced : Establishment of Herbal Garden & Model

Nursery for Medicinal Plants

- Name of crops for which seeds produced : Medicinal Plants
- Quantity Produced : 1.00 Lakh
- Quantity Sold : -
- Condition of Market : -
- Whether Funds Disbursed to Agency :

Beneficiary No. -4

Name of Project	: Green House (Tubular Structure)
Year of Implementation	: 2010-11
Project Period	: 5 Years
Name of the Implementing Agency	: Shivkumar, Angadihalli
Location of Project	: Angadihalli, Hagare, Belur Taluk
Total Project Cost	: 4.50 Lakhs
Amount Released by DAC	: 1.83 Lakhs
Expenditure Incurred	: 4.00 Lakhs

Beneficiary No. - 5

- Name of Nursery and crops for which plants are produced : Vegetable Nursery (Chilli, Tomato, Brinjal, Cabbage)
- Name of crops for which seeds produced : Production of Chilli, Tomato, Brinjal , Cabbage seedlings
- Quantity Produced : 9.00 Lakh
- Quantity Sold : 9.00 Lakh
- Condition of Market : Good
- Whether Funds Disbursed to Agency :

Beneficiary No. - 6

1. Name and Address of Beneficiary whose field visited	: Doreswamy, Doddachakanahalli, Kattaya.
2. Total Land Available with the Beneficiary (ha)	: 2.80 ha
3. Crop Cluster under which covered	: 0.80 ha
4. Name and Variety of crop Planted	: Banana, (Tissue Culture) G-9
5. Sources of Planting Material	: Hesaragatta, Bangalore
6. Number of Plants Planted/Rejuvenated	: 2500
7. Dare of Planting/Rejuvenation	: December
8. Number of Plants which survived (also indicate percentage survival)	: 2500 (100%)
9. Total Amount of subsidy assistance due to the beneficiary as (Rs.)	: 24,960/-
10. Amount Paid and Date of Payment	: 24,960/-
11. Mode of Payment	: Amount Credited to Beneficiary Bank A/c
12. Source of Irrigation Water (Bore well/Tube well/Canal)	: Bore Well
13. Whether Drip/Sprinkler System in use	: No
14. Other inputs provided	: No
15. Whether assistance availed for Organic Farming	: No
16. If so, area covered	: No
17. Assistance availed	: No
18. Available marketing facility for the crop	: Local Market
19. Other infrastructure available in the vicinity	: No
20. General upkeep of the plot : Very good/Good/Average/Poor	: Good

21. Any Other relevant observation by the JIT : No

Beneficiary No. - 7

1. Name and Address of Beneficiary whose field visited : Rangaswamy, Bayadarahalli, Kattaya.

2. Total Land Available with the Beneficiary (ha) : 1.00 ha

3. Crop Cluster under which covered : 0.80 ha

4. Name and Variety of crop Planted : Mango (Badami), Sapota (Cricket Ball)

5. Sources of Planting Material : Departmental Nursery

6. Number of Plants Planted/Rejuvenated : 80

7. Dare of Planting/Rejuvenation : August

8. Number of Plants which survived : 80 (100%)
(also indicate percentage survival)

9. Total Amount of subsidy assistance due to the : 12355/-
beneficiary as (Rs.)

10. Amount Paid and Date of Payment : 12355/-

11. Mode of Payment : Amount Credited to Beneficiary Bank A/c

12. Source of Irrigation Water (Bore well/Tube well/Canal) : Bore Well

13. Whether Drip/Sprinkler System in use : No

14. Other inputs provided : No

15. Whether assistance availed for Organic Farming : No

16. If so, area covered : No

17. Assistance availed : No

18. Available marketing facility for the crop : Local Market

19. Other infrastructure available in the vicinity : No

20. General upkeep of the plot : Very good/Good/Average/Poor : Good

21. Any Other relevant observation by the JIT : No

Beneficiary No. - 8

Name of Project	: Plant Health Clinic
Year of Implementation	: 2007-08
Project Period	: 5 Years
Name of the Implementing Agency	: Agriculture College, Karekere
Location of Project	: Agriculture College, Karekere, Hassan
Total Project Cost	: 20.00 Lakhs
Amount Released by DAC	: 13.29 Lakhs
Expenditure Incurred	: 13.29 Lakhs
List of equipments procures	: Laminar air flow, Autoclave, Electronic Balance, BOD Incubator, Stereo Zoom Binocular, Micro Pipette
Whether trained manpower deployed	: Yes
Arrangements made to meet recurring cost	: Yes
Current status	: Good

Beneficiary No. - 9

Name of Project	: Disease Forecasting Unit
Year of Implementation	: 2007-08
Project Period	: 5 Years
Name of the Implementing Agency	: Agriculture College, Karekere
Location of Project	: Agriculture College, Karekere, Hassan
Total Project Cost	: 4.00 Lakhs
Amount Released by DAC	: 2.53 Lakhs
Expenditure Incurred	: 2.53 Lakhs

List of equipments procures : Laminar air flow, Autoclave, Electronic Balance, BOD Incubator, Stereo Zoom Binocular, Micro Pipette

Whether trained manpower deployed : Yes

Arrangements made to meet recurring cost : Yes

Current status : Good

Beneficiary No. - 10

Name of Project : Leaf Tissue Analysis Lab (Public Sector)

Year of Implementation : 2010-11

Project Period : 5 Years

Name of the Implementing Agency : Agriculture College, Karekere

Location of Project : Agriculture College, Karekere, Hassan

Total Project Cost : 20.00 Lakhs

Amount Released by DAC : 20.00 Lakhs

Expenditure Incurred : 20.00 Lakhs

List of equipments procures : Macro KJeldahl unit, BOD incubator, Flame photometer, Shaker, Microwave oven, pH meter, Centrifuge, Water distillation units with auto cut-off (single), Analytical balance, UV-Vis. Spectrophotometer, Computer for the above equipment, Digital camera

Whether trained manpower deployed : Yes

Arrangements made to meet recurring cost : Yes

Current status : Good

Beneficiary No. - 11

Name of Project : Leaf Tissue Analysis Lab (Private Sector)

Year of Implementation	: 2010-11
Project Period	: 5 Years
Name of the Implementing Agency	: Hassan District Planters Association, Sakaleshpura
Location of Project	: Hassan District Planters Association, Sakaleshpura
Total Project Cost	: 26.10 Lakhs
Amount Released by DAC	: 10.00 Lakhs
Expenditure Incurred	: 26.10 Lakhs

List of equipments procures : Atomic Absorption Spectrophotometer meter, Digital Spectrophotometer, Digital Flame photometer, Digital Conductivity meter with cell, Digital pH meter with electrode. electronic balance All glass double distillation unit with electronic relay unit, Laboratory shaking machine, Electronic automatic kelplus macro block digestion system, Electronic Kelpus micro processor based distillation system

Whether trained manpower deployed	: Yes
Arrangements made to meet recurring cost	: Yes
Current status	: Good

Observations:-

(i) SHM has sanctioned one Plant Health Clinic, one disease forecasting unit, one leaf / tissue analysis lab and the model nursery for medicinal/ aromatic plants to Agriculture College, Hassan.

(ii) The Plant Health Clinic has been serving the farmers of the region to diagnose various diseases and pests affecting horticulture crops and also suggesting remedial measures to

control the same. The college also conducting regular training programmes for farmers for managing pests and diseases of horticulture crops in the region.

(iii) The model nursery for medicinal plants established under NHM has not produced any planting material and maintenance of the nursery is very poor.

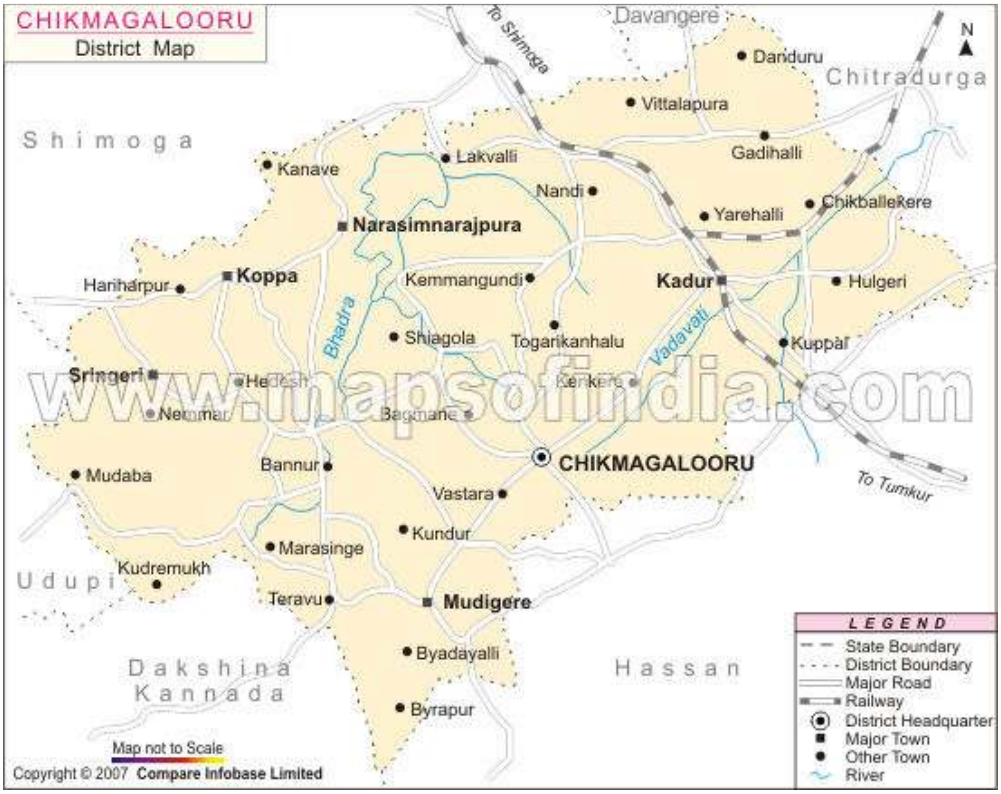
(iv) AEP for TC banana in village;- Doddachakonally needs to be supported with drip irrigation under NMMI.

(v) A leaf tissue analysis lab established to the Planters Association and Sakleshpur has been serving satisfactory with regard to analysis of micro nutrients, Ph values and soil analysis etc.

Recommendations:-

(i) The activities sanctioned to the Agriculture College, Hassan need to be reviewed by the DOH and measures to be taken to utilize infrastructure developed for disease forecast unit leaf tissue analysis lab. It is suggested that the college in coordination with DOH should work out the demand for planting material of medicinal plants and start producing the material accordingly.

DISTRICT : CHICKMAGALORE



INTRODUCTION:

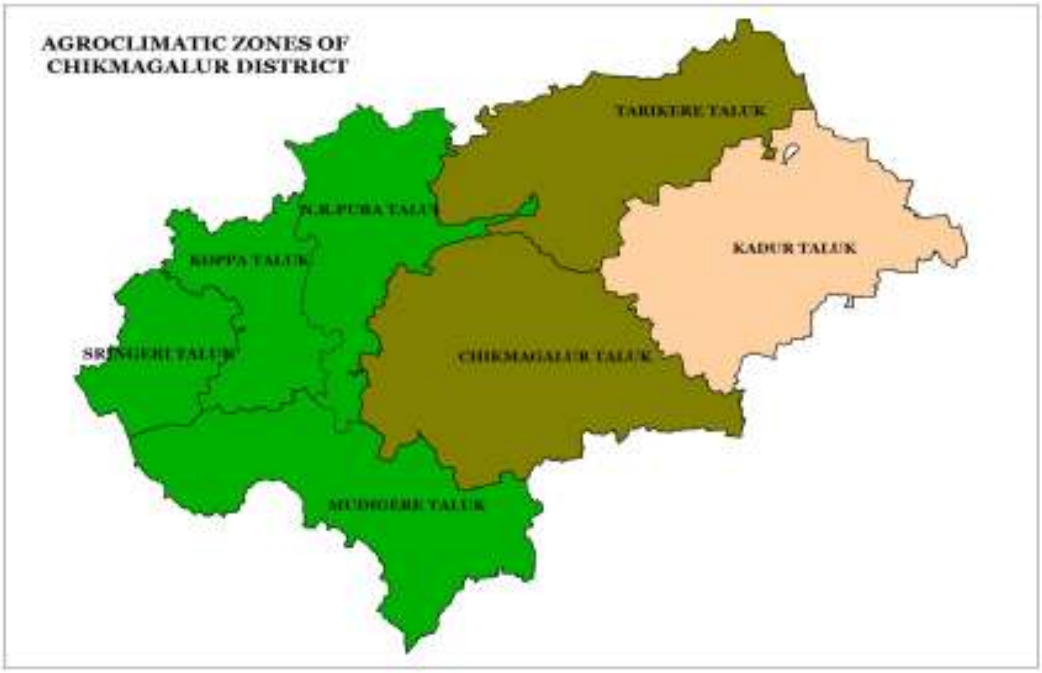
Chikmagalore stands at the forefront in its richness in natural resources and varied agro-climatic conditions. The total geographical area of this district is 7201 sq. km (722075 ha.). The total cultivable area of Chikmagalore district is 331401 hectares. Out of this horticulture crops are grown in an area of 113258.40 hectares with production of 566162.22 tons valued at 135662 lakh rupees.

A large area is covered by malnad taluks and hence it is popular as malnad district. Out of 7 taluks, Tarikere, Kadur and parts of Chikmagalore taluk are maidan areas and Koppa, Sringeri, Narasimharajapura, Mudigere and parts of Chikmagalore taluk are malnad areas.

AgroClimatic conditions :

On an average, Chikmagalore recieves rainfall of **1886.4 mm**. Malnad taluks like Sringeri, Koppa, Narasimharajapura and Mudigere recieve heavy rainfall , where as

maidan taluks like Tarikere, Kadur and parts of Chikmagalore receive low rainfall. Relative humidity is higher during September month (80%) and lower during Febraury month. Temperature goes up to 35^0 c during summer months and during winter months it goes down upto 8^0 c to 10^0 C. District is Classified into 3 zones, Hilly zone-9, southern Transitional zone-7, Central Dry zone-4.



Classification into different zones based on climatic conditions:

Zone	Taluks
Hilly zone-9	Koppa, Sringeri, Mudigere, Narasimharajapura
Southern transitional zone-7	Tarikere and Chikmagalore
Central dry zone-4	Kadur

a) Rainfall:

Chikmagalore district receives very good rainfall and the spread is between June to September months. Average rainfall of the district is 1886.4 mm. Taluk wise rainfall data is given below

Rain fall data of Chikmagalore District		
Sl NO.	**Taluk**	**Average rain fall mm**
1	Kadur	634.3
2	Chikmagalore	871.8
3	Tarikere	921.8
4	N R pura	1355.7
5	Mudigere	2585.8
6	Koppa	2616.1
7	Sringeri	3799.1
	District Average	**1886.4**

b) Soil :

Chikmagalore is having lateritic, red, Sandy loam, clay soil rich in Iron and Aluminium. P^H of the soil ranges from 5-5 to 7-00. The soil are suitable for growing varied horticulture crops.

c) Water sources :

Six major rivers of Karnataka namely Tunga, Bhadra, Hemanvathi, Vedavathi , Yagachi and Nethravathi take birth in Chikmagalore district. Major part of the water required for cultivation of many horticulture and agriculture crops is met from these rivers. Some natural sources like ponds, tanks, lakes, wells also fulfill the water requirement.

d) Irrigation :

The net irrigated area of Chikmagalore is 37,418 ha. Canals provide water to an area of 9,444 ha, tanks 9,241 ha, wells 358 ha, borewells 8,505 ha, lift irrigation 142 ha and other sources provide water to an area of 9,276 ha, respectively.

Source	Area(in ha)
Canals	9444
Wells	358
Tanks	9241
Lift irrigation	142
Borewells	8505
Other sources	9726
Net irrigated area	3741

e). Land holdings:

Size of the holdings	No.	Area (in ha.)
a) Marginal farmers (below 1 ha.)	106163	51736
b) Small farmers (1to 2 ha.)	50697	71518
c) Semi medium farmers (2 to 4 ha.)	26154	70051
d)Medium farmers (4 to 10 ha)	10453	60293
e) Large scale farmers (More than 10 ha.)	2168	50371

Total area under horticulture crops **: 113258.40 ha.**

Infrastructure Present in the district

1. Markets:

APMC at Chikmagalore, Kadur, Koppa , Sringeri, Tarikere

2)Cold Storages:-

MCF cold storage unit of 10 tons capacity is present in the district.

3)Godowns:

APMC godowns and Karnataka marketing federation godowns are present in the district and are used for storing fertilizers and food grains

4) Processing Units ;

No noted processing units are present in the district, but small scale pickling units, banana chips making units are located in Koppa, N. R. pura and Sringeri taluks.

5) Training Centres:

There are four training centers in the district offering training in horticulture and allied activites

A) Agriculture training center at Lingadahalli

B) Horticulture training center at Mudigere.

C) KVK-Mudigere

D) COBSET training center Chikmagalore

6) Labour availabality:

There is a acute scarcity of labours in malnad areas (For coffee, cardamom, pepper plantations etc,). But relatively less in maidan areas like Kadur and Tarikere

7) Communication and connectivity:

There is good network of roads connecting other parts of the state. Train facility is restricted only to Kadur and tarikere taluks of the district.

Horticulture crops grown in Chikmagalore district

Chikmagalore	Coconut, Arecanut, Banana, Potato and other vegetables, Ornamental plants and Spice crops
Kadur	Coconut, Arecanut, Banana, Ginger, Onion and

	other vegetables
Tarikere	Coconut, Arecanut, Cocoa, Oil palm, Mango, Banana, Ginger, Betel leaf and vegetables, Rose
Mudigere	Cardamom, Pepper, Banana, Ginger, Arecanut,Cocoa, Mandrins, Betel leaf and spice crops, Anthuriums
Koppa	Arecanut, Pepper, Banana, Cocoa, Betel leaf and spice crops, Anthurium.
Narasimharajapura	Banana, Cardamom, Pepper, Ginger, Cocoa, and other spice crops. Oil palm.
Sringeri	Arecanut, Spices, Bananna.

Horticulture Crops :

This district is highly suitable for growing most of the Horticulture crops. However major horticultural crops grown are plantation crops like Coffee, Coconut and Arecanut , spice crops like Cardamom, Pepper Ginger, vegetables like Potato, Chilli, Tomato, flower crops like Rose, Anthuriums, Chrysanthemum, Marigold, fruit crops like Banana, Mango, Mandrins, Sapota.

To boost up horticulture production and increase the area under horticulture crops, different schemes of Zilla panchayath, Taluk panchayath and National horticulture Mission are being implemented in this district and this has resulted in marked increase under the area of horticulture crops along with production. The schemes that come under Zilla Panchayath are raising of coconut seedlings and fruit plants ,maintenance of farms and nurseries, encouraging oil palm cultivation, micro irrigation scheme, taluk panchayath schemes include farmers training, distribution of plant protection chemicals at subsidized rate, area expansion and development of fruit crops.

National Horticulture Mission

National Horticutlture Mission is being implemented from 2006-07 in this district which include following schemes –Establishment of nurseries, Vegetable Seed Production, Area expansion of fruits, spices, flowers , medicinal and aromatic plants, protected cultivation (Green house construction), Organic horticulture, Integrated nutrient management, Integrated pest management, development of processing and marketing facilities(infrastructure), post harvest management activities (packhouses, Onion

Storage Structures), rejuvenation of old and senile plantations and human resource development activities etc.

Detailed information about NHM Scheme implementation

Sl No	Programmes	Total developed area(Ha) / units from 2006-07 to 2010-11	Beneficiary no.
1	Model Nursery	2	2
2	Small Nursery (Public Sector)	8	8
3	Small Nursery(Provite Sector)	6	6
4	Vegetable seed Production	31	135
5	Mango Area Expansion	1196	1701
6	Sapota Area Expansion	465	
7	Banana Area Expansion	1627	2372
8	Tissue culture Banana	240	320
8	Cut Flower Area Expansion	280	1026
9	Loose Flowers expansion	701	
10	Spice Crop AEP Black Pepper Ginger	 1428 596	4612
11	Organic horticulture	450	1320
12	Vermicompost/ Biodigestor	532	
13	Integrated nutrient management	24861	86412
14	Integrated pest management	32747	
15	Beekeeping	1874Boxes	251

16	Creation Water resources		
a	Community Tank	4	4
b	Individual Water storage structure	19	19
17	Human resource management		5548
18	Mechanization in Horticulture	11	11
19	Protected cultivation		
a	Poly house	5.67	79
b	Shade net	25.94	230
20	Pack House	11	11
21	Primary Processing unit	4	4
	Total		104071

Beneficiary No.-1

Low cost Poly House(Vegetable Seed Production)

Name of Project : Vegetable seedling production
Year of Implementation : 2010-11
Project period : 2010-11
Name of Implementing agency : Chandrashekar s/o Basappa shetty, Muguluvalli, Chikmagalur Tq.

Location of Project : Chandrashekar s/o Basappa shetty, Muguluvalli, Chikmagalur Tq

Total project Cost : 5,14,402/-

Amount Released by DAC : 1.93 lakhs
Expenditure incurred : 1.93 lakhs
Status of Project : Vegetable seedling production
Name of Nursery and crops for which plants are produced : Chandrashekar s/o Basappa shetty, Vegetable Seedling Nursery, Plants produced- Vegetable Seedlings
Quantity produced : 2,00,000 vegetable seedings

Quantity sold : 1,80,000

Beneficiary No. -2

SMALL NURSERY

Name of Project : Durge gowda s/o Ninge gowda, Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq

Year of Implementation : 2009-10

Project period : 2009-10

Name of Implementing agency : Durge gowda s/o Ninge gowda, Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq.

Location of Project : Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq.

Total project Cost : 5.48 lakhs

Amount Released by DAC : 1.50 lakhs

Expenditure incurred : 1.50 lakhs

Status of Project : Nursery producing pepper, Areca, Coffee planting material.

Name of Nursery and crops for which plants are produced : Vinayaka Nursery, pepper, Areca, Coffee planting material

Name of crops for which seedlings produced : pepper, Areca, Coffee planting material.

Quantity produced : pepper-1.00 lakh, Areca-25,000

Quantity sold : Pepper- 1 lakh

Beneficiary No. -3

BANANA AREA EXPANSION

Name and address of Beneficiary whose field visited : B.J.Somashekarappa s/o Gangadarappa, Bikanahalli, Chikmagalur Tq.& Dist.

Total land available with the beneficiary (ha) : 5.32 acre

Crop Cluster under which covered : Banana Area Expansion

Name and Variety of crop planted : Grand nine (Tissue culture Banana)

Sources of planting material : Tissue culture Banana-Ligature Biotech ltd. Bangalore

Number of plants planted planted/rejuvenation : 3800 plants

Number of plants which survived (also indicate percentage Survival): 100%

Total amount of subsidy assistance due to the beneficiary as (Rs)

Amount paid and date of payment : 37,400/-

Mode of payment : Cheque, No 081131

Source of irrigation Water (Bore well/Tube/Canel) : Bore well

Whether Drip/Sprinkler system in use : Drip irrigation

Other inputs provided : No

Whether assistance availled for Organic Farming : No

If so, area covered:

Beneficiary No.4

MANGO AREA EXPANSION

Name and address of Beneficiary whose field visited : Mango Cluster. Kasaba Hobli. Tarikere Taluk. Chikmagalore Dist. 171 No of farmers covered under mango AEP

Total land available with the beneficiary (ha) : 160 Ha Cluster is covered by mango AEP

Crop Cluster under which covered : Mango cluster

Name and Variety of crop planted : Alphanso

Sources of planting material : Rathnagiri Area. Maharastra

Number of plants which survived (also indicate percentage Survival) : 98%

Total amount of subsidy assistance due to the beneficiary as (Rs):

Amount paid and date of payment : 36,00,000

Mode of payment : Cheque

Source of irrigation Water (Bore well/Tube/Canel: Borewell

Whether Drip/Sprinkler system in use: Drip irrigation/ basin method of irrigation

Other inputs provided: 2009-10: Neem cake 200kg+Wellgrow 4 kg
2010-11: Micro nutrient 8kg, VAM 10kg, Wellgrow 8kg

Whether assistance availled for Organic Farming : yes

If so, area covered : 50 Ha

Beneficiary No.- 5

MANGO AREA EXPANSION

Name and address of Beneficiary whose field visited: Mango Cluster.
Amruthapura Hobli.
Tarikere Taluk.
Chikmagalore Dist. 390
No of farmers covered under mango AEP

Total land available with the beneficiary (ha): 340 Ha Cluster is covered by mango AEP

Crop Cluster under which covered : Mango cluster

Name and Variety of crop planted : Alphanso

Sources of planting material : Rathnagiri Area. Maharastra

Number of plants planted planted/rejuvenation:

Number of plants which survived (also indicate percentage Survival): 98%

Total amount of subsidy assistance due to the beneficiary as (Rs):

Amount paid and date of payment : 76,50,000

Mode of payment : Cheque

Source of irrigation Water (Bore well/Tube/Canel): Borewell

Whether Drip/Sprinkler system in use: Drip irrigation/ basin method of irrigation

Other inputs provided : 2009-10: Neem cake +Wellgrow
2010-11: Micro nutrient , VAM , Wellgrow

Whether assistance availled for Organic Farming : No

If so, area covered : No

Beneficiary No. -6

Protected cultivation: Shade net(Capsicum growing)

Name of Project : Capsicum growing under Shade net

Year of Implementation : 2010-11

Project period : 2010-11

Name of Implementing agency : Sanna Nanjundappa S/o Thimmegowda. Lingla pura, kadur (T). Chikmagalore Dist

Location of Project : Sanna Nanjundappa S/o Thimmegowda. Lingla pura, kadur (T). Chikmagalore Dist

Total project Cost : 2,15,000

Amount Released by DAC : 60300/-

Expenditure incurred : 60300/-

Status of Project : Capsicum growing under Shade net

Total area under shade net : 3000 sq mt.

Area considered for subsidy : 1000 Sq mt

Beneficiary No. -7

SAPOTA AREA EXPANSION

Name and address of Beneficiary whose field visited: K.S.Virupakshashetty s/o Shankarappa, Karkipete, Chikmagalur Tq.

Total land available with the beneficiary (ha) : 2.07 acre

Crop Cluster under which covered : Sapota Area Expansion

Name and Variety of crop planted : DSH-1

Sources of planting material : UAS-Dharwad

Number of plants planted planted/rejuvenation : 100

Number of plants which survived (also indicate percentage Survival): 98%

Total amount of subsidy assistance due to the beneficiary as (Rs): 2009-10: Rs 7516/-, 2010-11: Rs 3914/-

Amount paid and date of payment: 2009-10: Rs 7516/-

2010-11: Rs 3914/-

Mode of payment : Cheque

Source of irrigation Water (Bore well/Tube/Canel): Borewell

Whether Drip/Sprinkler system in use : Drip irrigation

Other inputs provided : 2009-10 Neem cake 200kg+Wellgrow 4 kg
2010-11 Micro nutrient 8kg,
VAM 10kg, Wellgrow 8kg

Whether assistance availled for Organic Farming : No

If so, area covered:

Beneficiary No.-8

SMALL NURSERY

Name of Project: Durge gowda s/o Ninge gowda, Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq

Year of Implementation : 2009-10

Project period : 2009-10

Name of Implementing agency : Durge gowda s/o Ninge gowda, Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq.

Location of Project : Vinayaka Nursery, Vastare Post, Somawarpete village, Chikmagalur Tq.

Total project Cost : 5.48 lakhs

Amount Released by DAC : 1.50 lakhs

Expenditure incurred : 1.50 lakhs

Status of Project : Nursery producing pepper, Areca, Coffee planting material.

Name of Nursery and crops for which plants are produced: Vinayaka Nursery, pepper, Areca, Coffee planting material.

Name of crops for which seedlings produced: pepper, Areca, Coffee planting material.

Quantity produced : pepper-1.00 lakh, Areca-25,000

Quantity sold : Pepper- 1 lakh,

Observations:-

(i) Nurseries supported under NHM for vegetable seedlings production under protected cultivation are functioning well and farmers are getting good income with the sale of planting material. In most of the cases, the seedlings are raised on the basis of indents from other farmers.

(ii) Small nurseries for production of black pepper planting material are functioning well. In view of the demand, more such nurseries need to be supported .

(iii) The nursery for production for black pepper planting material functioning under the control of DOH needs to be upgraded.

(iv) Shade net protected cultivation for Capsicum is showing encouraging results at Linglapura village.

(v) Multi-purpose processing unit established at Katagale with the support of NHM for PHM of Arecanut and Pepper has been found very useful and helps in reducing the labour cost as well as improving the quality of produce with negligible post harvest losses.

(vi) Selection and procurement of planting material by the farmers themselves from the DOH approved nurseries has shown better establishment of plants growth and minimum mortality.

(vii) The cluster of about 480 Ha. lab at Talikare taluk developed under NHM, Area Expansion Programme for mango has started giving production is about 25% of the area under crop.

Recommendations:-

(i) In view of huge expected production of mango in Tarikare taluk cluster, there is a need to establish ripening chambers, pack houses as well as processing units.The action needs to be initiated.

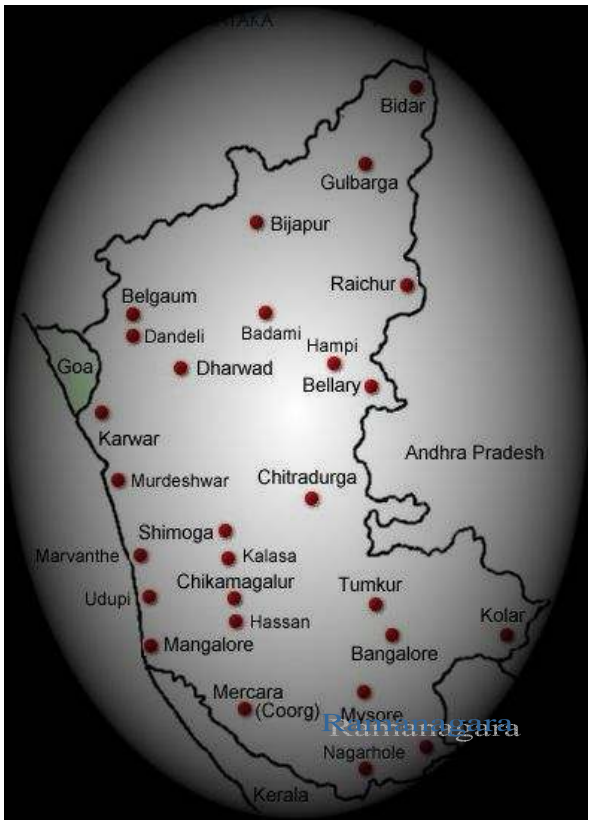
(ii) In view of the demand, more number of nurseries for production of black pepper planting material need to be supported.

(iii) Multi-purpose processing needs to be supported for reducing the PH losses and improvement of quality.

(iv) In view of field operations for horticulture crops, there is a need to examine the support for tractors of less than 20 HP under horticulture mechanization.

DISTRICT : RAMANAGARA

Geography and Climate.



Ramanagara District is geographically situated 12.72 North latitude and east latitude and 77. 3 South west of Bangalore. It is the 28th District of Karnataka and is carved out of Bangalore Rural District. The annual average rainfall ranges from 800 to 900 mili meters. The climatic condition and the soil condition of the district is congenial for growing most of the Horticulture crops.

Ramanagara District is surrounded by Mandya District on the Western side, Bangalore Urban Dist. on the East, Chamaraja Nagara Dist on South, Bangalore Rural Dist. on North. This district is 740feet above the MSL. This district has four taluks [Kanakapura, Ramanagara, Channapattana and Magadi Taluks], 18 Hoblies, 130 grama panchayats and 823Villages.

More than one third of the district is hilly terrain. There are 73 hills in Ramanagara of which Ramagiri, Krishnagiri, Shivagiri, Jalasiddeswara, Revanasiddeswra, Yatirajgiri are important and tourist attraction Places. This district is also known as **SILK CITY**, since15,000ha area is under sericulture. And nearly 45nos reeling centers are functioning in the district.

Total Population of the district is 10.30lakhs. Main occupation is agriculture, Horticulture, Sericulture and other allied activities.

Total geographical area of Ramanagara District is 355912 hectares(3555 Sq. kms). The Total Cultivable Area is 176401 Ha of which net sown agriculture cropped area 131000Ha.

Geographical Area of the District and Scope for Horticulture Development.

- **Total geographical Area : 355912 Ha**
- **Total Cultivable Area : 176401 Ha**
- **Total Agriculture Crops Area : 131000Ha**
- **Total Horticulture Crops Area : 58330 Ha**
- **% tage of Horticulture Crops in geographical Area of : 16.38 %**

District

- **% tage of Horticulture Crops in Cultivable Area of District : 33.06 %**
- **Total fallow Area : 29470 Ha**

Source of supply of seed/planting material along with name of the varieties.

Sl. No.	Section	No.of Nurseries	Crop & Varieties	
			Crop	Varieties
1	Government	8	Sapota	Cricket ball Kalipatti
			Mango	Alphonso Raspuri Mallika, Sendura
			Guava	A.Safed
			Pomegranate	Bhagwa
			Coconut	Tall
			Minor Fruits	Jack, Sithaphal, Amla, Rose apple, Jamun, Bhale etc
2	Private	15	Papaya	Thaiwan
			Lime	Local
			Ornamental	All

Crop wise extent of area (Ha.) identified for rejuvenation.

Sl. No	Crop	Total Area (District)		
			2010-11	2011-12
1	Mango	20010	400	400

Crops identified for the District indicating specific varieties.

- Mango : Badami and Mallika

- Sapota : Cricket Ball Kallipatti.
- Banana : G -9 and Elakki.

- Flowers : Rose : Gladiator, Red Ruby.
- Loose Flowers : Local varieties.

Crop wise (variety wise) Production and supply of nucleus seed/planting material and Outsourcing of planting material indicating address of recognized sources, if need be.

Sl. No.	Section	No.of Nurseries	Annual Production Capacity (No.of Graft plants)		
			Crop	Varieties	No.s
1	Government	8	Sapota	Cricket ball Kalipatti	1,00,000
			Mango	Alphonso Raspuri Mallika, Sendura	1,00,000
			Guava	A.Safed	25,000
			Pomegranate	Bhagwa	5,000
			Coconut	Tall	20,000
			Minor Fruits	Jack, Sithaphal, Amla, Rose apple, Jamun, Bhale etc	10,000
2	Private	15	Papaya	Thaiwan	100000
			Lime	Local	6000
			Ornamental	All	2,00,000

Sl. No.	Crop	Variety	Annual Production Capacity (No.of Graft plants)
1	Sapota	Cricket Ball Kalipatti, DSH-1 & 2	1,00,000
2	Mango	Alphonso, Rasapuri	1,00,000
3	Fig	Bellary Red	25,000
4	Pomegranate	Bhagwa	58,000
5	Papaya	Thaiwan	1,00,000
6	Ornamental	Local	2,00,000
7	Coconut	Local	20,000
8	Lime	Local	6,000
9	Minor Fruits	Jack, Sithaphal, Amla, Rose apple, Jamun, Bhale etc	16,000
Total			**4,25,000**

Abstract

Number of nurseries/ tissue culture labs, green house established along with the capacity of production of planting material.

Sl. No.	Component	Numbers	Production Capacity
1	Green house	**5**	**3,00,000**
2	Nurseries	**10**	**4,25,000**

Extent of creation of infrastructure facilities such as community tanks, tube wells, drip irrigation, tissue culture units, disease forecasting units, biological labs and their utility.

Sl. No.	Component	Numbers
1	Community Tank	**15 Nos**
2	Drip irrigation	**4000 ha**
3	Biological labs	**1 No.**

Area, production and productivity of the crop (crop wise) (2004-05 onwards)

Crops	2004-05			2005-06			2006-07			2007-08			2008-09			2009-10		
	Area	Prodn.	Prodty.	Area	Prodn.	Prodty.	Area	Prodn.	Prodty.	Area	Prodn.	Prodty.	Area	Prodn.	Prodty.	Area	Prodn.	Prodty.
Mango	17416	137651	7.9	17456	156352	8.95	18328	164169	8.96	18878	169094	9.0	20010	195375	9.76	20750	205143.	9.8
Banana	2830	68960	24.36	2782	69885	25.12	3060	76873	25.12	3152	79179	25.1	4409	99157	22.49	4909	104114.	21.2
Sapota	580	5435	9.37	528	4965	9.4	544	5213	9.58	560	5369	9.6	762	9250	12.14	862	9712	11.2
Grapes	11	330	30	14	905	62.71	15	950	63.33	15	979	65.2	13	350	26.92	13	367.5	28.2
Coconut	25957	1726	0.001	25538	1435	0.05	26815	1507	0.06	27351	1552	0.057	25010	3144 l.nuts	0.10	25000	3144 l.nuts	0.1
Arecanut	1871	1998	1.06	1848	1396	0.75	1940	1465	0.76	1979	1509	0.8	2227	3453	1.55	2227	3625.65	1.62
Betelvine	392	5217	13.3	383	4849	12.66	402	5092	12.67	410	5245	12.8	379	3930 lack leaves	10.40	350	3500 lack leaves	10.5
Tomato	908	17688	19.48	933	21964	23.54	979	23062	23.56	999	23754	23.8	1195	34882	29.19	2000	36626.1	18.3
Potato	0	0	0	0	0	0	0	0	0.00	0	0	0	0	0	0.00	0	0	0
Chillies	363	2022	5.57	396	2976	7.51	416	3125	7.51	424	3219	7.6	233	2586	11.10	233	2715.3	11.6
Brinjal	285	7365	25.84	313	7989	25.52	329	8388	25.50	336	8640	25.7	903	23480	26.00	903	24654	27.3
Cabbage	9	102	11.33	25	322	12.88	26	338	13.00	27	348	13.1	57	1355	23.77	57	1422.7	24.9
Cauliflower	11	144	13.09	10	107	10.7	11	112	10.18	11	115	10.3	12	226	18.83	12	237.3	19.7
Tamarind	841	3127	3.71	836	3513	4.2	878	3688	4.20	896	3799	4.2	811	4055	5.00	811	4257.7	5.25

Ginger	53	598	11.3	50	641	12.82	53	673	12.70	54	693	12.8	54	693	12.82	54.06	727.8	13.4
Turmeric	88	352	4	119	565	4.74	125	593	4.74	128	611	4.8	128	611	4.79	127.5	641.3	5.03
Rose	8	16	2	14	28	1.98	15	29	1.93	15	30	2.0	15	30	1.95	15.3	31.35	2.04
Jasmine	275	1569	5.7	305	1669	5.47	320	1752	5.48	326	1805	5.5	326	1805	5.53	326.4	1894.7	5.80
Marigold	39	362	9.2	44	718	162	46	754	16.39	47	777	16.6	47	777	16.55	46.92	815.451	17.3
Crossandra	28	22	0.78	31	24	0.77	33	25	0.76	34	26	0.8	34	26	0.77	33.66	27.03	0.80
Aster	8	48	6	11	64	5.81	12	67	5.58	12	69	5.6	12	69	5.64	12.24	72.6	5.91
Others	2499.8	31496	12.6	2943	4250	1.441	1015	9994.2	9.85	1035	10294	9.9	1035	10294	9.94	1035	10808	10.4
Total	**51973**	**254732**	**4.90**	**51637**	**286827**	**5.55**	**54347**	**297821**	**5.48**	**56688**	**317105**	**5.6**	**57672**	**388473**	**6.7**	**59778**	**407896**	**6.82**

Beneficiary No. -1

AREA EXPANSION PROGRAMME

1. Name and address of Beneficiary whose field visited.

Sri. Shivanna,Padarahalli Village,Kasaba Hobli, Ramanagara taluk, Ramanagara District, Karnataka State. (during 2010-11 under NHM.)

2. Total land available with the beneficiary (ha). : 0.80ha.

3. Crop Cluster under which covered. : MANGO AEP.

4. Name and variety of crop planted. : Badami (Alphanso)

5. Sources of planting material : Department Of Horticulture,Karnataka

6. Number of plants planted. : 60

7. Date of planting : August 2010.

8. Number of plants which survived : 60 (100%)

9. Total amount of subsidy assistance due to the beneficiary as (Rs) :-

10. Amount paid and date of payment. : Rs.5156.00

11. Mode of payment. : Through Bank

12. Source of Irrigation Water : Bore well.

13. Whether Drip/ Sprinkler system in use. ; No

14. Other inputs provided : Neem Cake, liquid Organic Manure and Others.

15. whether assistance availed for organic Farming : YES for Bio digester.

16. If so, area covered : -

17. Assistance availed : Rs.0.30 Lakhs.

18. Available marketing facility for the crop : APMC RAMANAGARA.

19. Other infrastructure available in the vicinity. : NIL.

20. General upkeep of the plot. Very good.

21. Any other relevant observation by the JIT. –

Beneficiary No. -2

Rejuvenation : Mango.

1. Name and address of Beneficiary whose field visited: Sri. Prabhu,Padarahalli Village,Kasaba Hobli, Ramanagara taluk, Ramanagara District, Karnataka State. (during 2009-10 under NHM.)
2. Total land available with the beneficiary (ha). : 5.0 ha.
3. Crop Cluster under which covered. : MANGO Rejuvination.
4. Name and variety of crop planted. : Badami (Alphanso)
5. Sources of planting material : Department Of Horticulture, Karnataka
6. Number of plants Rejuvenated. : 100
7. Date of Rejuvenation : August 2009.
8. Number of plants which survived : 100 (100%)
9. Total amount of subsidy assistance due to the beneficiary as (Rs)-
10. Amount paid and date of payment. : Rs.15,000.00
11. Mode of payment. : Through Bank
12. Source of Irrigation Water : Bore well.
13. Whether Drip/ Sprinkler system in use. : YES.
14. Other inputs provided : Neem Cake, liquid Organic Manure and Others.
15. whether assistance availed for organic Farming : No.
16. If so, area covered : -
17. Assistance availed : -
18. Available marketing facility for the crop : APMC RAMANAGARA.
19. Other infrastructure available in the vicinity. : NIL.

20. General upkeep of the plot. Very good.

21. Any other relevant observation by the JIT. –

Beneficiary No. -3

Technology Dissemination through FLD

Name of Project : Technology Dissemination through FLD

Year of Implementation :2010-11

Project period : 2010-11

Name of implementing Agency : KSHMA KARNATAKA

(Indian Institute Of Horticulture, GOI, Bangalore.)

Location of Project : Ramanagara District.

Total Project Cost : Rs.10.00 Lakhs.

Amount Released by DAC: : Rs.10.00 Lakhs.

Expenditure incurred: : Rs.10.00 Lakhs.

Status:

- Name of Crop : Mango
- Technology adopted : CONTROL OF FRUIT FLY USING PHERAMON TRAPS.
- Whether location easily approachable ; YES

Beneficiary No. -4

Name of Project : Establishing Fruit Ripening Chamber.

Smt.Sarojamma W/o Late Siddaiah

Kurubarahalli Village,Kasaba Hobli,

Ramanagara taluk, Ramanagara District, Karnataka State.

Year of Implementation : 2010-11

Project period : 2010-11

Name of implementing Agency : KSHMA, Karnataka.

Location of Project : **Kurubarahalli Village,Kasaba Hobli,**

Total Project Cost : a. Rs.49.50 lakhs. (Total Capital Cost : Rs.24.00 lakhs).

Amount Released by DAC : Rs. 9.60 lakhs

Expenditure incurred : Rs. 9.60 lakhs

Current Status of project : Fruits (Mango and Banana) are ripened and

Marketing in and around Bangalore and other Cities.

- Capacity : 2400MT
- Infrastructure facilities created :
- Whether funds disbursed : YES

Beneficiary No.-5

Name of Project : Establishment Of BIO DIGESTER

Year of Implementation : 2009-10

Project period : 2009-10

Name of implementing Agency : KSHMA, Karnataka.

Location of Project : Sri. Narasimhaiah Padarahalli Village,Kasaba Hobli,

Ramanagara taluk, Ramanagara District, Karnataka State

Total Project Cost : Rs. 0.60 Lakhs.

Amount Released by DAC : Rs.0.30 Lakhs

Expenditure incurred : Rs.0.30 Lakhs

Status:

- Crops covered : Mango, Banana, Papaya, Flowers
- No of farmers involved : One
- Name & Address of Certifying agency : Not applicable.

- Whether any certificate issued : Not applicable.
- Whether funds disbursed : YES.

Beneficiary No.- 6

Name of Project : Development of APMC Market yard & Marketting Halls.

Year of Implementation : 2007-08

Project period : 2007-08-2009-10

Name of implementing Agency : KSHMA, Karnataka.

Location of Project : APMC Yard, Ramanagara Town , Ramanagara taluk, Ramanagara District, Karnataka State.

Total Project Cost : Rs.48.00 Lakhs.

Amount Released by DAC : Rs.12.00Lakhs

Expenditure incurred : Rs.12.00Lakhs

Status : At APMC Yard in Ramanagara Cement Flat farm with in market and three market hall are in good condition and utilized by the farmers.

-Size of market in terms of area : 15acres.
- Facilities created ; Cement Flat farm with in market and three market hall
- Commodities sold : Fruits and Vegatables.
- Approachability : Excellent (Bangalore and Mysore State Highway)
- Condition of market **: GOOD.**
- Whether funds disbursed to Agency : **YES.**

Observations:-

(i) In case of Area Expansion for different crops, cluster approach is not being followed.

(ii) Rejuvenation of mango orchards has impressive effect on the productivity and beneficiaries are happy. The rejuvenation has been taken up for orchards. There is a lot of scope for its extension and need to be supported.

(iii) Ripening chamber for banana and mangoes is popular among beneficiaries and the numbers of units need to be increased by following strictly the technical specifications and under hygienic conditions.

(iv) At present, for mango ripening the charges being taken are on the higher side. The Department of Horticulture may explore the possibility of reducing these charges to a reasonable rate.

Recommendations:-

(i) In case of AEP, the cluster approach need to be followed as per NHM norms.

(ii) In view of increase in area expansion and rejuvenation, there is a need to have more number of ripening chambers.

Proceedings of the wrap-up meeting of Joint Inspection Team held on 07.05.2011 at KSHMA office, Lalbagh, Bangalore.

Members present :

1. Dr. H.V.L. Bathla, Chief Consultant, NHM, GOI.
2. Dr. R. KrishnaManohar, Principal Investigator (PFDC), UAS, Bangalore.
3. Director, Directorate of Arecanut and Spice Development, Calicut.
4. Director, Directorate of Cashew & Cocoa Development, Kochi.
5. Dr. R. Jayaprakash, Executive Director, KSHMA, Lalbagh, Bangalore.
6. Sri. S.T. Hanumaiah, Deputy Director of Horticulture, KSHMA, Lalbagh, Bangalore.

The Joint Inspection Team (JIT) under the leadership of Dr. H.V.L. Bathla, Chief Consultant, NHM, GOI visited Ramanagar, Mandya, Mysore, Hassan and Chickmagalore districts of Karnataka from 2nd to 7th May 2011. During the wrap-up meeting held on 7th May 2011 with Executive Director (NHM) and detailed interaction, the points enunciated in the meeting are as follows.

1. Infrastructure developed under private sector are progressing well and need to be encouraged in future on need basis.
2. There is a need of effective co-ordination between Department and Agriculture Universities, since financial assistance provided to the universities has not given any desired results. Even primary infrastructure at Nagenahalli Organic Farming Centre and College of Agriculture, Hassan has not been initiated.
3. The cluster approach as per the norms of NHM is lacking except in Chickmagalore district. The initiation by Deputy Director of Horticulture, Chickmagalore is the point of appreciation.
4. The JIT visit to various districts need to be effectively managed to avoid unnecessary journey time.
5. The Deputy Directors of Horticulture should provide every document to JIT members during the visit which was lacking in all the districts except Chickmagalore.

General Recommendations:-

(i) In area expension programmes, technical support and supervision need to be improved.

(ii) In AEP, cluster approach as per NHM norms need to be strictly followed.

(iii) In general, the nurseries supported under NHM producing vegetable seedlings are producing quality material on demand from other farmers and needs to be encouraged.

(iv) There is a need to establish ripening chambers, pack houses for mango and banana respectively in big clusters where production has started.

(v) In view of scope for rejuvenation for mango orchards, more importance should be given to rejuvenation.

(vi) Bee keeping is found to be more beneficial because of enhancing the pollination in increasing the yield of crops like guava, coconut, lime, papaya & vegetables.This needs to be encouraged and training should be imparted.

(vii) There is a need to maintain the records of the activities of Plant Health Clinics.

(viii) Plant Health Clinic in the private sector should have technical person for analysis & suggestions.

(ix) The model nursery supported for medicinal plant to Agriculture College, Hassan should start production of planting material.

(x) The model nursery supported under NHM to Organic Farming Research Station, Naganahalli for production of planting material should start production of material immediately.

(xi) The plant health clinic sanctioned to Organic Farming Research Station, need to be established as per norms for the benefit of farmers and this should be monitored by DOH.