Table No. 7.1 Issues Related to important Commodities in the District

Crop	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Cotton	Spurious and costly seeds. Exploitation of farmers by the seed traders. Cultivation under rainfed conditions and in poor soils. Lack INM, IPM, Failure of crop in inadequate as well as excessive rains. Leaf redening disorder in cotton. Becterial blight Sucking pests Low returns	Promotion of straight varities, INM, IPM & IWM. Pest surveillance, Cultivation on medium to heavy soils proper spacing, and protective irrigation, Proper fertigation schedule. Planting of cotton in 90x45 cm distance. The recommened dose of fertilizer 60:30:30, in rainfed condition. For treatment of leaf redening disorder 5 mt FYM + 30:30:30 NPK and 30 kg N 30 days after sowing and sprying of 2% urea at flowering stage + 1% urea at boll development stage + 1% MgSo4 . For the control of bectial blight seed treatment of pseudomonas fluorosence 10 gm per kg seed & spraying of pseudomonas fluorosence 20 gm in 10 lit water on 30,60 and 90 day after sowing. For sucking pest like aphids , jasids , whitfly, thrips spraying of metarizium anysopli 50 gm or verticilium lacani 50 gm in 10 lit water . for the control of whitefly spraying of diphenthuron 50 wt 12 gm in 10 lit of water . Use of refugee crop to avoid the development of BT resistance in insect. Sowing of cotton after 75 mm rainfall. Protective irrigation on flowering and boll development. Inter cropping of green gram and udid in cotton.	Training, demonstration, FFS on IPM, INM and village seed program. Training for proper drainage through BBF method.

Crop	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Soybean	High cost of cultivation,Moisture stress in critical growth stages, Excess rainfall in late stages, increasing infestation by semilooper, spodoptera girdle beetles etc. Some time excessive vegetative growth , soil degradation	In soyabean + Tur spraying of cycocyl 100 ppm or chlormaquat chloride 1000 ppm in flowering stage to control the excessive vegetative growth, For increasing the productivity of soyabean and to improve quality of soil use of phospho compost 2 ton per ha. And remaining amount of phosphors through chemical fertilizers In soyabean - Wheat cropping system liquid rhizobium + PSB 100 ml. each per 10 kg seed treatment along with recommended fertilizer dose for soybean 30:60:30. Use of recommended varieties, seed rate and spacing Timely sowing Promoting INM and IPM Cultvation on BBF	Training, demonstration, FFS on IPM, INM and village seed program. Training for proper drainage through BBF method
Tur	Use of local non treated seed Severe yield losses due to lack of INM and IPM Wilt and sterility mosaic All high yielding verieties are Long duration veriety Tur crop is never sown as sole crop , instead sown as marginal crop. Value addition in tur crop is not done sufficiently.	Promoting for use of high yielding , wilt and sterility mosaic verities Promoting INM and IPM Evolving or breeding high yielding short duration verieties. Proportion of tur crop in main crop should be increased Low cost and efficiently working tur dalmil should be designed.	1. Organizing seed village programme. 2.Orgainizing Farmers Field Schools for Tur 3. Organizing trainings and demonstrations on IPM, INM Organizing breeding and research programme. Organizing demonstration . To conduct the research on design of tur dalmil.

Crop	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Green gram	Low yield due to lack of protective irrigation . Attact of aphids , powdry mildew and yellow vein mosaic.	Construction of farmpond for the purpose of giving the protective irrigation and use of micro irrigation method. Evoulaving pest tollerence and disease resistant varieties.	Organizing demonstrations on farm pond and micro irrigation. Organizing training and demonstration on IPM, INM of green gram.
Gram	Shortage of irrigation water Lack of IPM Wilt	Construction of farmpond for the purpose of giving the protective irrigation and use of micro irrigation method. Promoting use of high yielding and wilt resistant variety. Promoting awareness on improved gram production technology , Educating farmers on IPM. Introduction of bold seeded Kabuli varieties.	Organizing demonstrations on farm pond and micro irrigation Use of mass media, seed production programme of recommended verity . Training and demonstrations on improved technology and IPM. Organizing farmers field schools on gram Supply of Trichoderma ,HNPV, Neem powder
Groundnut	Seed of veriety of true types are not available in market. Improper sowing time. Shortage of irrigation water. Seed treatment with rhizobim and PSB not done. Attack of tikka disease. Seed cost of ground nut is very high , proper seed rate is not followed. Micronutrient and gypsum doses are not given to ground nut crop.	Certified seed production programme should be organized on large scale area. The sowing time is depend on harvesting of previous crop , seed availiability in market and availability of irrigation water these problem should be solved. To make available PSB and rhizobim culture before sowing time of ground nut. Seed treatment with carbendenzim . To use BBF or dibbling method for sowing of ground nut Application of micronutrient and gypsum should be followed.	Organizing seed village program Linking with seed supply agencies for seed Demonstration on seed rate, spacing and IPM. Training and field demonstration Method demonstration. Field demonstration. Training and demonstration.

Crop	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Onion	Low yield due local seed used Lack of nursery management.. Severe yield losses due to Thrips and onion blight High cost of production and low returns due to highly fluctuating market rates The onion is highly perishable commodity	Educating onion cultivators about production and use of good seed Promoting for IPM in onion Promoting for Onion storage structures Use of kanda chal should be promoted.	Organizing training on seed production, seedling and improved technology. Organizing FFS for integrated crop management. Convergence with ongoing onion storage schemes. Training and demonstration.
Turmeric	Lack of seed treatment Traditional system of cultivation on ridge and furrow Lack of drip irrigation Lack of proper Fertigation Fluctuation in prices and absence of processing facilities	Designing machinery and equipment for seed treatment of turmeric seed. Educating on improved raised bed technology of cultivation Use of farm pond and micro irrigation. Recommended fertilizer doses should be applied through drip. Organizing , educating and promoting for processing and value addition	Method demonstration. Exposure visit to research stations and successful cultivators Training and demonstration and construction of community farm ponds. Trainings o n INM /IPM Trainings and study tour.

Banana	Use local planting material Lack of Drip irrigation Lack of scientific fertigation Exploitation by traders	Use high yielding tissue culture plants for plantation. Promoting drip irrigation and fertigation Determing the proper doses of fertigation and making available proper soluble fertilizer. Group marketing or direct marketing with value addition.	Demonstration on intensive cultivation of banana by using tissue culture plant . Trainings on drip and fertigation Technology Result demonstration and training Formation of farmer producer companies and farmers groups.
Crop	**Problems/Issues**	**Proposed Strategies**	**Proposed Extension Activities**
Marigold	Unavailability of proper verieties. Seed is very costly. Proper fertilizer and insecticide doses are not followed. Timely availability of flowers in market.	Conducting reaserch and breeding programme for evoulation of proper verieties. Distribution seed on subsidy. Soil test base fertilizer application. Conducting reaserch and breeding programme for evoulation of proper verieties.	Research. Formation of govt. scheme. Training and demonstration. Research.

Sweet Orange(Mosambi) and Orange	Unavailability of quality planting material	Estiblishement of ideal mother plant nurseries.	Govt inititative for conducting research programme.
	Attack of phytophthora, dieback , whitefly, fruit sucking moth , leaf miner	Use of IPM.	Training and demonstration. .
	Absence of proper grading standards and processecing facilities.	Establishment of standards and processing facilities and pack house.	Training and study tour.
	Hailstorm and untimely rain at flowring time.	Use of protective nets and plantation of shelter belts.	Demonstration and study tour.

Crop	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Rabbi Jowar	Inadequate soil moisture during growth stages	Educating and promoting farmers for adoption of dry land technology. Use of sprinklers. Early sowing.	1. Organizing farmer's exposure visit to Dry land research station. 2. Organizing trainings on dry land technology. 3. Demonstrations on Dry land technology
	Absence of organic manure application , high seed rate & moisture stress. Infestation of shoot flies due to late sowing.	Application of organic manure and vermi compost Proper spacing & maintain plant population. Use of Thiomethoxam for seed treatment	1. Use of mass media for creating awareness about importance and use of organic manures for Jowar. 2. Incentives for conversion of seed drill.
	Use of local seed Negligence towards pest/disease , Lack of value addition	Promoting improved certified seed, Promoting village seed production. Awareness about IPM Promotion for value addition Grading, Packaging, Branding And processing through FIGs	1. Organizing seed village program in potential villages. 2. Linking with research station for foundation /certified seed 1. Organizing training, FFS on , IPM and value addition 2. Exposure visit to processing units, research stations
Wheat	No seed treatment, low seed rate and Improper spacings Late sowing, Lack of INM,	Seed treatment with azatobactor and PSB Promoting for use of proper seed rate and spacing Timely sowing in second fortnight of octomber. Promoting INM. and IPM	Training and method demonstration. Front line demonstration Training and demonstration Training and demonstration
Maize	Low returns due to lack of value addition & processing ,Lack of INM Damages from wild animals.	Promoting for processing of maize Awareness about INM Promoting sweet corn maize Provision of fencing	Organizing exposure visits to processing units Organizing trainings on processing & value addition Formation of FIG for processing. Study tours.

Table No 7.2 Issues related to Important Enterprises in the District

Enterprises	Issues	Proposed Strategies	Proposed Extension Activities
Agriculture	Sucking pest complex in Cotton and *Heliothis* in gram is a major concern.	Educating farmers on Integrated pest management	Organizing season long FFS for each crop
	Over-exploitation of groundwater resources	Educating farmers about water management by popularizing micro – irrigation system	Use of mass media, training on water budgeting and water harvesting through different methods Scope for artificial groundwater recharge
	Growing cost of cultivation and diminishing returns from the farm produce.	Encouraging for balanced and recommended fertilizers & plant protection measures. Promoting for production and application of recommended organic fertilizers.	Use of Mass media Training on production of different farm based organic fertilizers and application of bio-fertilizers. Integrating with subsidized scheme on vermi compost
	Potential for Jowar crop which is a major staple food and fodder source	increasing productivity of rabbi Jowar and intensifying of dairy enterprise	Introducing of high yielding rabbi Jowar varieties. Increasing co-operative dairies by linking with existing agencies.
	Livestock based farming system has good potentials due to availability of good fodder for milch animal.	Promoting for diversification of Animal Husbandry & Dairy enterprise	Exposure visit to most successful AHDS based farming system, organizing training program on AHDS enterprise
	In-situ water conservation is not practiced Rainfed zone with shallow soils results in crop failure	Encouraging for adoption of In-situ soil moisture conservation practices	Use of mass media Exposure visit to research station, success story.
Horticulture	Lack of organic manures	Promoting Bio fertilizers, vermi compost, in-situ compost making, preparation of compost by NADEP methods	Organizing training on use of bio fertilizers organic manure preparation. Convergence with ongoing schemes

Enterprises	Issues	Proposed Strategies	Proposed Extension Activities
	Lack of good quality planting material	Promotion for preparation of nurseries, use of shedding nets for nursery production	Organizing Training on nursery management for quality production of planting material. Convergence with ongoing schemes
	Lack of water in summer season	Promoting drip irrigation, micro irrigation, Preparation of water storage tanks on group basis	Use of mass media for creating awareness Convergence with ongoing schemes.
	Lack of market infrastructure, Market fluctuation and low prices	Promoting farmer organizations groups for market study and market linkage development	Use of mass media , study tour, training
	High cost of production and residual effect pesticides	Promoting biological pest control and organic farming	Use of mass media Creation of awareness
	Less knowledge about taking Bahar treatment	Educating cultivators regarding water management and Bahar treatments	Use of mass media Organizing training on Water management
	Soil fertility is decreasing due to undulating terrain and limited soil water conservation practices	Undertaking soil & water conservation activities Encouraging & educating about agro-forestry, farm-forestry and energy plantation	Exposure visit to success stories Use of mass media for creating awareness Organizing crop demonstrations on contour cultivation
	Water scarcity during summer season	Promoting water management and artificial groundwater recharge	Use of mass media for artificial groundwater recharging
	Improvement of drainage is in low-lying areas.	Promoting for proper drainage in low lying area	Use of mass media
	Growing cost of cultivation and diminishing returns from the farm produce.	Adoption of organic farming for minimizing cost of production	Organizing exposure visit to success stories Organizing training on organic cultivation practices
Sericulture	Low yield due to lack of technical knowhow being nontraditional crop in the district	Educating cultivators on recommended technology of mulberry cultivation and cocoon rearing practices	Organizing training on recommended technology of mulberry cultivation and cocoon rearing practices, arranging demonstrations
	Low yield due of	Arranging for supply of improved high	Convergence with on gong EGS linked scheme

Enterprises	Issues	Proposed Strategies	Proposed Extension Activities
	Improved high yielding mulberry varieties planting material of M-5, S-36, V-1	yielding mulberry varieties planting material of M-5, S-36, V-1	
	Low yield due to lack of timely availability of Egg Masses and under utilization of mulberry leaves for feeding the recommended silkworm larvae.	Educating about batch production of cocoon and requirement of egg masses	Use of mass media for creating awareness
	Low production, low quality and low rates due to lack of recommended sterilization and sanitation	Educating cultivators for recommended sterilization and sanitation	Use of mass media
	Scope for intensification of Area under mulberry plantation and cocoon rearing enterprise	Promoting for diversification of area under mulberry plantation	Organizing training on cultivation of mulberry and rearing of cocoon. Organizing exposure visit to Karnataka
Animal Husbandry Dairy	**Problems/Issues**	**Proposed Strategies**	**Proposed Extension Activities**
	Local low yielding breed and poor management.	Improvement in breed and management.	A.I. Camps, training, study tour.
	The milk co-operatives are becoming non viable.	Encouraging milk co-operatives for good management practices	Organizing training for office bearers of Co-operative milk Society's at Co-operative Institute. Organizing exposure visit to successful Co-operative milk Society's.
	Scope for improving the fodder crop	Encouraging & educating about agro-forestry, farm-forestry and energy plantation	Organizing training on agro- forestry, farm forestry & energy plantation.
	Scope for innovations in Khoa industry.	Preparation of milk by-products by forming group of farmers and marketing directly	Organizing training on khoa and other milk by product preparation and marketing by proper packaging & branding. Use of Khoa Machines.
	Low milk production due to unavailability of required quantity of green fodder,	Promoting for cultivation of improved of forage and fodder verity	Supply of seed on subsidy basis for multiplication of seed of forage crops.

Enterprises	Issues	Proposed Strategies	Proposed Extension Activities
Animal Husbandry Dairy	concentrates minerals, vitamins on availability of nutritious forage varieties and more feeding of dry roughage's.	,Strengthening Paravets for veterinary services Educating farmers on animal nutrition and disadvantages of inbreeding Promoting for combination of stall feeding with open grazing	Use of mass media Training and capacity building of veterinary Paravets Training of farmers
	Lack of proper feeding, breeding and health care management in dairy animals leading to poor quality and low milk production per animal	Encouraging farmers for better management of animals	Use of mass media for creation of awareness.
	Low availability of good forage and fodder, in-breeding, infections, infertility	Promoting for forage crop cultivation by introducing high yielding forage crops Promoting for adoption of recommended management practices and timely vaccinations	Organizing demonstrations on forage crops cultivation Organizing training on animal management and vaccination programmes.
	Milk rates not paid on fat percentages basis	Promoting milk payments on fat basis by adopting Milko- Testing Machine	Providing milko-testing machine to successful dairy society.
Poultry	**Problems/Issues**	**Proposed Strategies**	**Proposed Extension Activities**
	Unavailability of chicks of improved breed	Establishing hatcheries Supply of improved breed fertile eggs	Promotion of backyard poultry, Promotion of hatcheries Training on skill part in hatcheries
	Lack of awareness on poultry health care	Creating awareness	Training on vaccination and hygiene
	Exploitation in Market	Direct linkage to consumers	Promotion of group marketing

Enterprises	Problems/Issues	Proposed Strategies	Proposed Extension Activities
Fisheries	Unavailability of seed	Rearing of fish seed in private ponds	Demonstration Training Financial support
	Lack of awareness about stocking and feed management Absence of cold storage facilities.	Trainings Input supply Establishment of cold storage facilities	Trainings Exposure visits Study tour.