



GOVERNMENT OF KERALA

**AGRICULTURAL
DEVELOPMENT
POLICY**

2015

**Agricultural Development Policy
2015**

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6.3 Policy 2: The agriculturally potential land is to be identified and demarcated with the help of modern technologies such as remote sensing, satellite imagery, etc., and a database is to be made.	
6.4 Policy 3: The transactions on farmlands are to be made more transparent for protecting the interests of farmers	
6.5 Policy 4: Cultivable wastes should be brought under plough with immediate effect for augmenting the food production.	
6.6 Policy 5: Land owned by Kerala Agricultural University, Department of Agriculture, Department of Animal Husbandry, Department of Dairy, Veterinary University etc., should not be put for any other use than the purposes for which it was intended for.	
6.7 Policy 6: Appropriate legislative mechanism may be evolved for the promotion of 'Rent a Land for Farming' programmes.	
6.8 Policy 7: Necessary administrative mechanism may be evolved for bringing the different agencies connected with land related activities under one co-ordination agency.	
6.9 Policy 8: The Government should have the aim of employing Information Technology to transform the existing system of land records maintenance and thereby ensuring efficient, accurate and transparent delivery mechanism and conflict resolution in ownership of land.	
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7.6 Policy 9: Preservation and sustainable use of water should be the motto of all crop production programmes of the state.	
7.7 Policy 10: Water budgeting should be adopted in a watershed basis.	
7.8 Policy 11: Rain water harvesting and aquifer recharge would be given priority for ensuring the stability and supply of water.	
7.9 Policy 12: The micro-irrigation technology is to be popularised in the state with adequate share of state budget.	

- 7.10 Policy 13: Farm ponds and Thalakkualams needs to be promoted and protected.
- 7.11 Policy 14: Sub surface dykes are to be constructed at possible places for the ground water recharge
- 7.12 Policy 15: The irrigation canals of Kerala are to be structurally reset for the prevention of seepage loss of water.
- 7.13 Policy 16: The activities of the Committee on the release of irrigation water should be in deeds than in words.
- 7.14 Policy 17: Pumping subsidy provided to the Kuttanad and Kole land farmers are to be routed through the Department of Agriculture.
- 7.15 Policy 18: All interstate water sharing g agreements have to be timely reviewed to promote thrust areas of irrigation development.
- 7.16 Policy 19: Irrigated agriculture being the largest water demanding sector, special attention has to be given for creating and sustaining irrigation infrastructure.

08. Soil related policies

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- 8.3 Policy 20: Bio-Manure production is to be enhanced for reviving the soil health and should be one of the primary activities of the Department of Agriculture.
- 8.4 Policy 21: The production potential of the soil is to be improved.
- 8.5 Policy 22: The first week of June of every year shall be observed as 'Green Manure Week' by the State Government for the promotion of green manuring methods and green manure crops.
- 8.6 Policy 23: A cadastral Level soil information system is to be launched
- 8.7 Policy 24: Make every effort to reduce soil erosion on a watershed basis.
- 8.8 Policy 25: Steps should be take to develop regional nutrient plans on a watershed basis preferably.

09. Climate & environment related policies

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- 9.4 Policy 26: Research & Development initiatives are to be strengthened in climate change adaptation for sustenance of agricultural production in the State of Kerala.
- 9.5 Policy 27: Network of meteorological observatories should be increased.
- 9.6 Policy 28: There is a need to train skilled personnel in the field of climate change adaptation and mitigation.
- 9.7 Policy 29: Optimize the ecological load on the natural systems as well as building up the State's economy while minimizing environmental degradation.
- 9.8 Policy 30: The Government should make a focussed approach to facilitate the possibility of strategic planning for systematic Disaster Management, as well as for contingency planning at District, Block and Grama Panchayat levels against all emergencies, pro-actively (for preparedness, prevention and mitigation) and responsively (for response, relief, repatriation, rehabilitation, reconstruction, the whole way to recovery in the full Disaster Cycle).

10. Policies related to watershed development approach

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- 10.2 Policy 31: Agriculture planning and development programmes of the state shall be based on watershed.
- 10.3 Policy 32: It is the responsibility of the state for water management / water poverty.
- 10.4 Policy 33: The watershed development plans are made to improve rural livelihoods and reduce poverty by developing and strengthening community based approaches.
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11. Policies to address farmers in distress

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- 11.6 Policy 34: The Government should take earnest steps to instill confidence in the debt-ridden farmers for the prevention of farmer suicides for ever by the introduction of 'relief funds' or 'relief loans' so that the immediate financial requirement can be met by them.
- 11.7 Policy 35: The approach of the financial institutions needs to be changed while attempting for recovery from the debt ridden farmers and an integrated resource base analysis and separate fringe credit support for them should be extended so that they would be brought above the repayment threshold level.
- 11.8 Policy 36: The loans taken by the real and full time farmers for their needs like housing, medical treatments, marriages, children's education and other unavoidable consumption needs are also to be treated as agricultural loans as the repayment is to be made from farming.
- 11.9 Policy 37: There is a need to strengthen the Mental Health Programmes at primary health care level, involvement of extension officials and institutions so as to offer support and counselling to vulnerable farmers.
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12. Farmer & farm labourer welfare related policies

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- 12.3 Policy 38: The Pension Scheme for farmers will continue
- 12.4 Policy 39: As agricultural development and farmer welfare are inseparably linked, a farmer welfare fund board is to be established.
- 12.5 Policy 40: There is a need to promote comprehensive health insurance schemes for farmers.
- 12.6 Policy 41: Agriculture labour banks will be started at Panchayat level to address the issue of shortage of agricultural labourers.
- 12.7 Policy 42: A production incentive should be awarded to the farm labourers who works in the agriculture sector for not below than 100 days.
- 12.8 Policy 43: Sufficient number of seats in professional courses should be reserved for the children of farmers so as to improve their social status.

13. Policies related to human resource development in farm sector

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- 13.4 Policy 44: Improved agricultural productivity depends on agricultural education and competency-based trainings and are essential for building the human resource capacity.
- 13.5 Policy 45: Develop the extension personnel of the state to meet the knowledge & skill requirements of farmers as self-reliant agri-preneurs.
- 13.6 Policy 46: Empowering the small farmers in order to have say in policy matters of government in agriculture sector would pave a way for better development.
- 13.7 Policy 47: It will be required to make necessary changes in the systems to provide scientific and technical knowledge and skills in agricultural operations to the input dealers, so that they may advise farmers in right direction & provide valuable extension services to farmers specially to small & marginal farmers
- 13.8 Policy 48: Extension personnel of the state will have to acquire latest knowledge as well skills in use of various electronic devices such as computers, multimedia, internet etc.
- 13.9 Policy 49: The Human Resource Development of the extension functionaries is to be done scientifically and time bound.
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14. Policies related to ICT application

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- 14.5 Policy 50: Immediate steps are to be taken to materialise the concept of 'Paperless Offices' in the case of Krishi Bhavans to assure services with 100% fastness and accuracy.
- 14.6 Policy 51: The planning process should be based on the real-time data generated with the help of modern ICT tools and State Agricultural Plan is to be developed every year
- 14.7 Policy 52: When ICT enabled technologies are made popular, Concentrate on the demand, not on the technology.
- 14.8 Policy 53: The Call Centers are to be made efficient.
- 14.9 Policy 54: Farmer databases are to be made perfect.
- 14.10 Policy 55: Provide need-based ICT training at all levels, but especially to youth, women and marginal farmer groups.
- 14.11 Policy 56: Necessary mechanism should be evolved for providing the market information to the farmers on a realtime basis with the help of ICTs
- 14.12 Policy 57: The modern ICT tools are to be modelled in such a way that it should provide information about rural development programmes and subsidies to farmers.
- 14.13 Policy 58: ICT enabled weather forecasting services, input prices and availability, early warning of diseases and pests and soil testing & soil sampling information are to be provided by SMS services.
- 14.14 Policy 59: There should be initiatives for the application of technologies such as 'Tele Presence' and 'Google Glass' for the conferences , technology refinement and transfer.

15. Policies related to technology dissemination and management

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- 15.2 Policy 60: Extension Services are to be made more efficient
- 15.3 Policy 61: Demand led extension is the need of the hour.
- 15.4 Policy 62: Group approach should be the motto in all the extension activities of the state.
- 15.5 Policy 63: The development of close co-operation between extension agencies and formal research institutes is essential if farmers are to be provided with the services they require.
- 15.6 Policy 64: The existing system of extension activities are to be put under one single body so that the services to farmers can be done efficiently.
- 15.7 Policy 65: The new face extension should provide integrated environmental support
- 15.8 Policy 66: Improved productivity of livestock and improved quality of the livestock keepers are possible only if policies focus directly on people and policy instruments are directed towards building their capacities for vibrant, competitive, informed and responsible participation in very aspect of the livestock sector.
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16. Policies related to markets and marketing

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- 16.4 Policy 67: Efficient marketing infrastructure such as wholesale, retail and assembly markets and storage facilities is essential for cost-effective marketing, to minimise post-harvest losses and to reduce health risks.
- 16.5 Policy 68: Reforms needs to be made in such a way that common marketing infrastructure is created in all major production centres under the direct control of producer organizations
- 16.6 Policy 69: The twin goals of ensuring justice to farmers in terms of a remunerative price for their produce and to consumers in terms of a fair and affordable price for food would be achieved through the establishment of 'AMUL' model outlets for the procurement and distribution of agricultural produces.
- 16.7 Policy 70: A separate Agricultural Marketing wing may be set up under the Department of Agriculture for the better infrastructural developments.
- 16.8 Policy 71: A perfect market intelligence system should be developed with the help of modern ICT tools and techniques.
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17. Policies on international trade related issues

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- 17.4 Policy 72: The WTO cell of the Department of Agriculture needs a reorganisation and made funcionally and professionally independent.
- 17.5 Policy 73: Equipping the farmers to produce the products with international standards and value added products to get an uniformity in production will sort out problems faced by farmers FTAs to a greater extent.
- 17.6 Policy 74: Terminal markets are to be watched carefully for the entry of restricted agro-produces in the disguised forms and strict ban on such items should be executed to protect the interests of the farmers.
- 17.7 Policy 75: Create Programmes supportive of small farmers and sustainable agriculture to save the livelihood of farmers.

- 18.3 Policy 76: FPO must be a body registered and administered by farmers and the organisation must be focused on activities in the agriculture and allied sectors.
- 18.4 Policy 77: State Government should take up formation of FPOs on a large scale through Centrally-sponsored and State-financed programmes and schemes.
- 18.5 Policy 78: FPOs must be based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity.
- 18.6 Policy 79: The Government should make 'Hand Holding Support' to FPOs by taking policy decisions and providing expert management man power.
- 18.7 Policy 80: The FPOs are to be designed in such a way as to provide 'end to end' services to its members.
- 18.8 Policy 81: The State Government may appoint SFAC as the Resource Institution (RI) for the promotion of FPOs.
- 18.9 Policy 82: The formation of FPOs are to be done in a scientifically organised basis so that sustainability of the same should be ensured.

- 19.4 Policy 83: Encourage custom hiring operation of tractors, power tillers and farm machinery through training, financial incentives, subsidized loans and adequate financing to allow procurement of high capacity equipment by the custom operator to ensure sufficient turn over and income.
- 19.5 Policy 84: Financial incentive should be provided for replacement of inefficient equipments by improved tools and implements
- 19.6 Policy 85: The State should develop strategies and approaches for optimum involvement of extensionists, researchers, development agents, and the eventual users of the technology as a unified body for the fast and effective farm mechanisation.
- 19.7 Policy 86: Developing human resources and generation of self-employment by way of providing skill-oriented training in the farm mechanisation sector is important.
- 19.8 Policy 87: Agricultural mechanization strategy ought to clearly define the roles of the private sector and that of the state.
- 19.9 Policy 88: Availability of machinery, equipment, spare parts and other supplies is essential for successful and sustainable mechanization.
- 19.10 Policy 89: To reduce drudgery and improve human labour productivity, there is a need to improve the design of existing tools and machineries.
- 19.11 Policy 90: Pollution free mechanization practices that conserve natural resources such as land, water and soil nutrients need to be promoted.
- 19.12 Policy 91: Farm mechanisation is a part of agricultural extension.
- 19.13 Policy 92: The agricultural machineries and implements shall be exempted from import duty and value added tax (VAT) in order to reduce the cost.
- 19.14 Policy 93: The installation of solar, wind and hybrid technology based high volume output pumps along the bunds of these Padasekaharams so that the power consumption and cost of cultivation could be minimised.

- 20.5 Policy 94: *An Actio Apportum* is to be introduced for the first time for assuring the farmers a legal demand of right for sharing revenue or profit generated out of the farm produce when it is traded.
- 20.6 Policy 95: A price fixation authority should be formed for fixing the price of the agricultural commodity in the state, so that protection from price falling would be enabled.
- 20.7 Policy 96: Minimum Support Price (MSP) for paddy, vegetables, banana and spices may be announced during the commencement of the season by the state Government with the help of the Price Fixation Authority.
- 20.8 Policy 97: An Agricultural Risk Fund may be formed with the objective of providing immediate assistance to farmers at the time of emergency.
- 20.9 Policy 98: The Agricultural Prices Board will be strengthened with broader guidelines.
- 20.10 Policy 99: Government should adopt 'Income Guarantee' programmes for the farmers as the main agricultural support instrument and an Act in this line should be passed.
- 20.11. Policy 100: The views of the farmers should also be taken in to account while the regulations on the management of threspassing animals in the farm lands causing crop loss.

- 21.4 Policy 101: Increase flow of credit to farmers including small and marginal, triggering agricultural growth led economic progress, which can lead to opportunities for a healthy and productive life to rural families.
- 21.5 Policy 102: The SHG Bank Linkage programme is the most appropriate financial mechanism to extend credit to marginal farmers.
- 21.6 Policy 103: All the District co-operative banks functioning in the state should apportion a sizeable portion for agricultural loans.
- 21.7 Policy 104: Interest free loans will continue.
- 21.8 Policy 105: Livelihood finance, which is a comprehensive approach to promoting sustainable livelihoods for the poor, is the need of the hour.
- 21.9 Policy 106: The loans taken for poultry, dairying and animal husbandry are also to be treated as agricultural loans.
- 21.10 Policy 107: An 'Agricultural Credit Relief Fund' is to be formed for addressing the waiver of loans in the event of natural calamities.
- 21.11 Policy 108: Take an integrated credit requirement approach combining farm and consumption needs and has to be adopted by the financial institutions.
- 21.12 Policy 109: Necessary mechanism should be evolved from the part of the state Government in the light of restrictions imposed on Primary Agricultural Co-operatives (PACs) in dealing with agricultural credit very recently by the Reserve Bank of India (RBI).
- 21.13 Policy 110: The agricultural credit must be monitored from the time of disbursal to the repayment.

- 22.8 Policy 111: Kerala cannot afford any more conversion of paddy lands, ecologically or economically.
- 22.9 Policy 112: Among the strategies for increasing rice production in the State, area expansion needs immediate attention.
- 22.10 Policy 113: The current productivity of 2.30 t / ha of rice has to be increased to 4.0 t / ha so as to achieve the production target of 12.0 lakh tonnes of rice from 3.0 lakh ha. within a span of five years
- 22.11 Policy 114: Rice farming has to be made more remunerative to attract more farmers for which measures to augment income from rice based farming has to be formulated
- 22.12 Policy 115: Considering the food security point of view and the environmental benefits of paddy cultivation, the land area ceiling of 2 ha. has to be raised to 5 ha. for availing the input and financial assistance of the Government Schemes
- 22.13 Policy 116: Paddy farmers are to be provided with incentives comparable to that of fruit plants and industrial crops.
- 22.15 Policy 117: Since the import of edible oils affects the price of the coconut adversely, the State Government has to pressurize the Central Government for setting up a frame work, so that the farmers would get remunerative price for coconut oil, even if the import of edible oil is happening.
- 22.16 Policy 118: Introducing dwarf varieties in at least 25% of the new trees or through under-planting in the existing coconut gardens for meeting the ever growing requirement of the State's Official Drink - the tender coconut water.
- 22.17 Policy 119: The long cherished dream of producing 'Neera' by the coconut farmers of the State is to be materialised for improving their income.
- 22.18 Policy 120: A new platform that would bring farmers, processors and retailers together have to be launched to link agricultural production to the market, to maximise value addition, minimise wastage and boost farmers' income.
- 22.20 Policy 121: 'Safe to eat' branding programme for vegetables is to be introduced for assisting the domestic production and attracting more consumers so that the farmers get more demand for their produce
- 22.21 Policy 122: Homestead farming of vegetables and popularisation of vegetable gardens in schools proved the impact on the increased vegetable production in the state and the programmes should continue.
- 22.23 Policy 123: Since more than 70 per cent of banana cultivation is done on leased lands by resource-poor farmers, obtaining maximum income from a unit area under cultivation assumes utmost importance.
- 22.24 Policy 124: By-product utilisation and product development should be given preference for assuring steady income from banana cultivation.
- 22.26 Policy 125: The government should develop a 'Mango Export Zone' in Muthalamad due to the early bearing nature, it could be exported at high prices.
- 22.27 Policy 126: Kerala is well known for some traditional mango varieties and the germplasm of them are to be protected and a research station under KAU should be set up for mango at Muthalamada.

- 22.28 Policy 127: Since climate plays an important role in the production of quality mangoes, an advisory system should be developed to protect the quality and production.
- 22.29 Policy 128: A separate insurance and supporting scheme for mango in the event of crop loss has to be built up.
- 22.31 Policy 129: Promoting tubers as an alternative to cereals will augment food security.
- 22.32 Policy 130: Tuber 'minikit' programmes are to be introduced for promotion of roots and tubers in the homesteads.
- 22.33 Policy 131: Tubers could be used to produce quality cattle-feed, thus bringing more profit to the farmers.
- 22.34 Policy 132: Exploit the new technologies, new variety of crops and bio-pesticides developed by institutions such as the CTCRI based on tuber crops so that the State can be self-sufficient in food and can reduce its dependence on other States
- 22.35 Policy 133: Demonstration of improved production technologies such yam minisett technique, yam staking methods, root/tuber based crops mixtures are to be adopted in departmental farms and farmers' fields.
- 22.36 Policy 134: Nucleus planting material production of improved varieties of tubers are to be carried out at Departmental farms.
- 22.37 Policy 135: Processing and value addition of tuber crops is to be treated as a priority area.
- 22.40 Policy 136: Area under pepper crop in the state is to be extended on a war footing to cater the domestic and international demand
- 22.41 Policy 137: Availability of sufficient quality planting material is to be assured for guaranteed production and productivity.
- 22.42 Policy 138: A serious attention as until new and diversified export markets are not exploited, the farmers would face crash in farm gate price due to the surplus stock.
- 22.43 Policy 139: A support price mechanism for the pepper crop is to be introduced for meeting the vagaries of price volatility.
- 22.45 Policy 140: The area expansion programme of nutmeg is to be done with caution, since the price of the produce began to show a declining trend.
- 22.47 Policy 141: If measures are not initiated soon, Cochin ginger and Alleppey turmeric will soon be crops of the past.
- 22.48 Policy 142: Measures for encouraging ginger cultivation should be oriented in the context of regional disparities and location specific strategies are to be made.
- 22.49 Policy 143: Institutional arrangements should be made to provide quality seeds and other package of inputs to the farmers to boost the output of ginger.
- 22.50 Policy 144: Since there is only limited scope for increasing area under ginger in Kerala as a monocrop, the existing potentialities of cultivating ginger as an intercrop in coconut, arecanut and young rubber plantations may also be exploited to the maximum possible extent.
- 22.51 Policy 145: To protect cultivators from incurring loss the Government should announce a support price for ginger.

- 22.52 Policy 146: Technological upgradation of processing is very much essential to improve the quality of dry ginger.
- 22.55 Policy 147: The policy initiatives towards promotion of cashew growers' FPOs (for procurement of raw nuts, supply of inputs, credit and infrastructure, small scale processing, value addition and marketing), and cashew apple processing will definitely widen the perspective of cashew growers.
- 22.56 Policy 148: The Cashew Corporation should enter the market to prevent owners of private cashew processing units from controlling the procurement price.
- 22.57 Policy 149: There is a need to increase domestic production to substitute imported raw nuts in order to derive the maximum benefits from a strong processing and marketing capability developed over the years by the cashew industry.
- 22.58 Policy 150: Value addition and product diversification should receive adequate attention of the Government for having competitive edge and higher returns in the years to come.
- 22.59 Policy 151: Production and productivity of cashew in the state can be enhanced through a phased replanting programme.
- 22.60 Policy 152: All the Cashew development agencies are to be effectively co-ordinated under the Department of Agriculture.
- 22.62 Policy 153: Standardization of technology to bring down cost of production of fresh pineapple and its adoption by growers, and technology to produce pineapple throughout the year may go a long way in promoting pineapple cultivation in Kerala.
- 22.63 Policy 154: Steps should be taken to popularise pineapple cultivation as an intercrop in the coconut gardens and rubber plantations to increase the production and income of the farmers.
- 22.64 Policy 155: The marketing of pineapple needs immediate attention as to improve the export potential of the crop for assuring better returns to farmers.
- 22.66 Policy 156: Establishment of model nurseries should be done in the state either in the public and or in the private sector to address the issue of shortage in the availability of new and good quality planting materials which is the most important limiting factor in the development of floriculture in Kerala.
- 22.67 Policy 157: Traditional Flower FPOs are to be established like cut flower growers' association for traditional flower growers.
- 22.68 Policy 158: Specific attention is to be given to the development of traditional flowers by assisting traditional farmers in terms of bank loans, proper marketing facilities, and dissemination of information through training and media support on improved varieties.
- 22.69 Policy 159: An insurance mechanism for the floriculturists against natural calamities of the state is to be formulated.
- 22.70 Policy 160: It is emphasized that the subsidies on poly/green-house, planting materials and specialized equipments should continue.
- 22.71 Policy 161: Efforts should be made to encourage small stakeholders to patronize flower cultivation for enhancing their income and employment avenues.
- 22.73 Policy 162: New avenues like contract farming and forest farming are to be explored as sustainable way to ensure the steady and constant supply of quality raw materials for drugs.
- 22.74 Policy 163: In order to initiate systematic cultivation of medicinal and aromatic plants high yielding varieties have to be selected.

- 22.75 Policy 164: Efforts to develop, use and promote the green technology for a sustainable production system of Medicinal and Aromatic Plants are to be made.
- 22.76 Policy 165: Small and marginal farmers will be organised into Self Help Groups and cooperative societies of medicinal plants growers or as producer companies to enable them to take up medicinal plants cultivation
- 22.78 Policy 166: Increasing fodder production and availability within the state through the intervention of co-operatives, SHGs and FPO's should be explored.
- 22.79 Policy 167: The State Government, in collaboration with agricultural universities and research institutes, will be responsible for developing, promoting and extending nutritious and high yielding varieties of fodder species for cultivation on agricultural lands.
- 22.81 Policy 168: There must be programmes to reintroduce minor millets to regions where they were once more popular.
- 22.83 Policy 169: There must be programmes for promoting pulses in the traditional as well as no traditional tracts utilising the paddy fallows.
- 22.85 Policy 170: There should be programmes to increase the number of bee hives from the present 6 lakh numbers to 30 lakh numbers in five years.
- 22.86 Policy 171: Bee keeping should be promoted as a vocation for women, youth, marginal farmers and self help groups and the number of bee keepers are to be doubled to two lakhs from the present one lakh and the concept of 'Honey Villages' has to be put in to reality.
- 22.88 Policy 172: On no account area under plantations should be used for growing any crop which is not notified before.
- 22.89 Policy 173: The rate of lease on Government land given for plantation purpose should be scientifically revised in every five years.

23. Policies for livestock development

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- 23.2 Policy 174: The farmers of the state would be helped for the improvement of their present resources by assessing the present potential of the livestock status and employing an 'Animal Performance and Control' mechanism to monitor, evaluate and upgrade the livestock population of the State.
- 23.3 Policy 175: All the livestock farmers of the state should be provided with 24 hour Veterinary Emergency Assistance Service.
- 23.4 Policy 176: The farmers of the State would be assured with a livestock population free of all the contagious diseases by universal vaccination and necessary steps would be taken to declare as Animal Disease Free Zone.
- 23.5 Policy 177: The farmers of Kerala are to be provided with yield and sex assured animals as a result of the cross breeding Programme.
- 23.6 Policy 178: The low yielding animals of the State must be used as Foster Mothers' for the production of improved breed by the embryo transfer technology.
- 23.7 Policy 179: The farmers of the State may be allowed to rear indigenous and accepted breeds of cattle for conservation purpose with guidelines from the Department of Animal Husbandry.
- 23.8 Policy 180: The farmers of the state are to be assured with one calf per year per animal.

24. Policies related to animal nutrition

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- 24.2 Policy 181: Every calf born in the state out of cross breeding programme should be guaranteed a well balanced feed to utilise the genetic potential of the calf for converting in to economic value.
- 24.3 Policy 182: Male calf fattening programmes are to be taken up by the Government for assuring nutrition to the male calves and for assuring wholesome meat to the consumers and thereby assuring better returns to the farmers.
- 24.4 Policy 183: The farmers of the state must be assured of getting quality cattle feeds and feed for other classes of livestock.
- 24.5 Policy 184: Fodder cultivation should be promoted on a mission mode on a commercial scale to ensure its availability to the farmers at affordable cost.
- 24.6 Policy 185: Area specific mineral mixture for dairy cattle should be formulated and made available to the farmers in order to correct mineral deficiency and effect production enhancement.
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25. Policies related to mechanization in animal husbandry and dairy

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- 25.3 Policy 186: Portable milking machines should be provided to milkers and farmers for the production of better quality milk in a shorter period and preventing the spread of contagious and managerial diseases.
- 25.4 Policy 187: Chaff cutters are to be provided to farmers for the better utilisation of crop residues and minimising the cost of production.
- 25.5 Policy 188: Automatic drinkers are to be established in each and every farm for ensuring production and improving animal health.
- 25.6 Policy 189: There must be steps at least to prevent the hoof ailments and accidents happening to cattle in their sheds thereby reducing the veterinary costs and loss of production.
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26. Policies for quality improvements in animal food production

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- 26.4 Policy 190: The potential for milk purchasers to misrepresent the quality of the milk and cheat farmers out of a fair price would be eliminated by the introduction of the Automatic Milk Collection System.
- 26.5 Policy 191: The meat sold in Kerala should originate from an approved slaughter house. Cleanliness at slaughter minimises the potential risk to human health, contributes to the production of safe meat, improves the shelf life of the meat, and consumer confidence.
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27. Policies for increasing profitability in animal husbandry

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- 27.4 Policy 192: The dairy cooperatives and Departments of the Government related to dairy development have to plan programmes to attract youth and sustain the present farmers towards dairy farming and dairy based enterprises.
- 27.5 Policy 193: A good incentive plan recognizes that individuals can make a real difference in the operation and its profitability

- 27.6 Policy 194: Since the farm sector aims at food security of the state, there must be an immediate end to the "division" of people on the lines of below poverty line (BPL) and above poverty line (APL) for receiving the financial assistances in the Animal Husbandry sector.
- 27.7 Policy 195: Input allocation plans of the Animal Husbandry sector must be in line with the holding capacity of the locality so as to develop a sustainable strategy for 'zonation of inputs'.
- 27.8 Policy 196: The present method of calculation of loss in the event of a natural calamity like flood, landslip, lightning, drought, disease outbreak, manmade disaster should be modified in such a way that the farmer gets the real value / market value as compensation rather than a token amount.
- 27.9 Policy 197: Financial assistance for feeding is necessary to bring down the cost of production and improving the profit of the farmers.
- 27.10 Policy 198: An advisory and technical Committee at Local Self Government level should be constituted for increasing the profitability of different enterprises connected with animal husbandry and assuring better returns to farmers.
- 27.11 Policy 199: Pricing of milk is to be done in a more scientific manner that the farmers should receive a remuneration well above the cost of production as their profit.

28. Polices related with dairying

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- 28.6 Policy 200: Provision for loans to dairy farmers for purchase of animals considering it as a farming activity.
- 28.7 Policy 201: Electricity on reduced rate than the industrial tariff should be provided to milk co-operative societies for chilling of milk.
- 28.8 Policy 202: Providing Insurance coverage to all dairy farmers and their milch animals
- 28.9 Policy 203: Utilisation of unutilised land under Local Self Government for fodder cultivation
- 28.10 Policy 204: Providing production incentives to dairy farmers on every litres of milk produced
- 28.11 Policy 205: An appeal committee with experts from Dairy Development Animal Husbandry and pollution control board shall be constituted to dispose of disputes regarding License and Pollution Certificate for Dairy Farming
- 28.12 Policy 206: Enhancement of cattle feed subsidy rate to 25% of cattle feed cost
- 28.13 Policy 207: Provision for financial assistance to dairy co-operatives for running milk chilling plant/Bulk Milk Coolers.
- 28.14 Policy 208: Strengthening of Dairy Advisory Services and Restructuring of Dairy Department
- 28.15 Policy 209: Farmers having up to five animals and farmers who market the milk through dairy co-operatives which is registered under co-operative law shall be exempted from the registration under Food Safety and Standards Acts
- 28.16 Policy 210: Every Primary school children upto 5th standard shall be provided with a glass of (200 ml) of milk daily on schooldays.
- 28.17 Policy 211: Where ever possible new cooperative can be registered thereby more farmers can be promoted to take up dairying.
- 28.18 Policy 212: Crossbred calves born out of AI Programme shall be purchased and brought up by selected farmers or a milk co-operative societies in the area under the heifer parks in every Block.

- 29.5 Policy 213: Kerala needs an action plan combining homestead and commercial production to achieve self-sufficiency in eggs.
- 29.6 Policy 214: Considering the fact that demand for chicken meat registers 40 to 45% growth across the state annually, broiler farming can be a main source of family income or can provide subsidiary income and gainful employment to farmers throughout the year.
- 29.7 Policy 215: Promote and propagate farming of diversified poultry species through technological development for their sustainable and profitable production.
- 29.8 Policy 216: Entry tax should be levied on imports and domestic production be exempted for broiler chicken.
- 29.9 Policy 217: Turnover tax per broiler chicken farmer of the state may be fixed at Rs. 10 lakhs per annum.
- 29.10 Policy 218: Considering broiler farming as an agricultural activity, the electricity rate shall be fixed at agricultural tariff.
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- 30.5 Policy 219: The Government has to ensure that Quality Declared Planting Materials (QDPMs) are produced and sold to farmers and treated as a right of farmers.
- 30.6 Policy 220: The planting materials including seeds produced and distributed by the Department of Agriculture, PSUs and other Government agencies shall bear bar-coded tags for assuring the quality and traceability.
- 30.7 Policy 221: High-tech nurseries for the production of quality planting material are needed in large numbers and standards for different planting materials needs to be put in place.
- 30.8 Policy 222: It is important to produce quality planting material of pepper, banana and ornamental crops through clonal multiplication and in vitro micro-propagation. Sensitive diagnostic assays such as ELISA and PCR for indexing and certification of clonally propagated and tissue culture plants have to be used.
- 30.9 Policy 223: The production of quality seed of major vegetable crops and seed spices should be given priority in collaboration with ICAR Institution, SAU's and PSUs of vegetable seed industry.
- 30.10 Policy 224: The certification of quality seed based on quality parameter should also be needed to advocate to progressive vegetable growers and farmers engaged in production of vegetable crops and seed spices. There is need to promote such farmers/vegetable growers for quality seed production.
- 30.11 Policy 225: Crop to crop seed quality control systems should be designed and established and Seed coating and pelleting are essentially required to protect the seeds from various diseases and pests as well as to enhance germination.
- 30.12 Policy 226: Varieties/hybrids should be developed for protected cultivation and protected production of seeds and planting materials should be standardized.

- 30.13 Policy 227: Nurseries growing and producing notified varieties should be exempted from taxes.
- 30.14 Policy 228: Large scale integration of conventional and innovative techniques of micro-propagation, aeroponics, etc is the need of hour to step up production of disease free planting material.
- 30.15 Policy 229: For better disease diagnostics in vegetatively propagated crops, cheaper alternative technologies in place of expensive chemicals should be developed. Production of cheaper diagnostic kits for use at farmers' level is the requirement of the day
- 30.16 Policy 230: Tissue culture should not become a tool for spreading of diseases, and due care and regulations need to be in place. Cost effectiveness of tissue culture plants needs focus of attention.
- 30.17 Policy 231: There is need to develop reproducible and efficient protocols for recalcitrant plant species such as mango, cashew, and coconut.
- 30.18 Policy 232: Production of seedlings of specific varieties of coconut needs to be strengthened for establishing gardens for promotion of product diversification.
- 30.19 Policy 233: Establishment of mother gardens and scion block with high density planting is highlighted in cashew, black pepper and tree spices and has to be practiced for increasing the production of planting material.

31. Policies related to fertilizers and plant nutrients

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- 31.3 Policy 234: For sustained agricultural growth and to promote balanced nutrient application, it is imperative that fertilizers are made available to farmers at affordable prices.
- 31.4 Policy 235: An appropriate policy that encourages balanced use of fertilizers (organic and inorganic) including micro- and secondary nutrients is a must.
- 31.5 Policy 236: The most critical issue concerns the quality of the fertilizers provided to the farmers, and therefore, the quality control system that ensures delivery of good quality fertilizers must be effective and efficient.
- 31.6 Policy 237: The use of single-nutrient fertilizers provides flexibility, lower cost per unit of nutrient and the advantage of applying only those nutrients that are needed and will generate an economic benefit.
- 31.7 Policy 238: In tune with the new subsidy regime of fertilizers, site specific nutrient management needs to be promoted based on soil testing results and Krishibhavan needs to be made as the centre to promote the concept and soil testing labs needs to be equipped to take up the challenge.
- 31.8 Policy 239: The use of micro nutrients should be encouraged in food crop to address the issues of micro nutrient deficiencies in soil, cattle as well as human being.
- 31.9 Policy 240: As High Tech Farming and precision farming are gaining momentum in the state, the specific fertilizers for the ventures should find a place in the Government fertilizer subsidy programmes.

- 32.4 Policy 241: A regular watch on computerized Online Pesticide Registration System and take action against companies and products which are marketed in the state without proper licensing under central Insecticides Board and strong regulatory frame work needs to be created and monitored within state for the same.
- 32.5 Policy 242: There is the need for an approach in the State which would minimise the use of hazardous pesticides.
- 32.6 Policy 243: Health costs can be mitigated considerably by reducing the dose of pesticides used and the approach of the extension workers should be oriented in that way.
- 32.7 Policy 244: Cheap, quick and non-destructive methods of detecting pesticide residues in raw fruits and vegetables should be made more popular
- 32.8 Policy 245: Kerala is having a well defined policy on 'Organic Farming' and on this light, organic pesticides are to be made freely available and the recent technology developed by CTCRI needs an intensified production.
- 32.9 Policy 246: Pesticide dealers should be made aware of the properties of the products they sell and workers engaged in spraying of pesticides should be trained and put through periodic and free medical examinations to determine their health status.
- 32.10 Policy 247: The sale of pesticides and weedicides should made based on the prescription issued by a competent officer of the Department of Agriculture.
- 32.11 Policy 248: A strong provision should be created to Monitoring of Pesticide Residues in food and Department representatives should be a party of the food safety team which is formed in the State to enact Food Safety Bill 2012.
- 32.12 Policy 249: Crop Health Management Centres should be taken up which can also look into pest and disease surveillance.
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- 33.4 Policy 250: The infrastructure facilities of the farms are to be improved for meeting the objective of mass production of quality planting materials and seeds for the timely distribution to farmers.
- 33.5 Policy 251: Mechanising the Government owned farms to the fullest extent (100% mechanisation) will be the only tool to tap the efficiency of the labourers in full.
- 33.6 Policy 252: A definite planting material production plan has to be developed taking in to consideration the scheme of the Government and the local requirement through an online system every year.
- 33.7 Policy 253: Demonstration of improved technologies are to be done in every farm.
- 33.8 Policy 254: Shortage of labourers in farms is to be addressed immediately by the Government
- 33.9 Policy 255: Since there is the need for many emergency activities including the disposal of perishable farm produces and immediate repair works, delegating more powers to the sub officers would aid in the more speedy actions in Departmental farms.
- 33.10 Policy 256: The Orange and Vegetable Farm, Nelliampathy and Horticulture Development Farm, Malampuzha are to be elevated to the position of Centres of Excellence.

- 34.4 Policy 257: Enhancing income of farmers through value addition, product diversification, and entrepreneurship development must be the thrust areas of the development Departments.
- 34.5 Policy 258: Creation of a food chain starting from the farm gate to retail outlets is inevitable for farmers to earn a greater share of the product sale revenue after adding value to their own produce.
- 34.6 Policy 259: To meet the emerging challenges, agriculture must diversify in favour of high-value enterprises and the pricing policy must be based on the quality of the produce rather than quantity for motivating the farmer to orient his production qualitatively.
- 34.7 Policy 260: Since marketing of processed products is more remunerative than raw commodities, farmer processor linkages are needed to add value as per demands of the consumers.
- 34.8 Policy 261: Storage and handling technologies and infrastructure should be designed in a manner that losses are minimised and the produce retains its original quality.
- 34.9 Policy 262: The New Generation Cooperatives (NGC) model and FPOs are ideal since it binds both farmers and processors to honour commitments and agreements.
- 34.10 Policy 263: There is a large potential for setting up of modern slaughter facilities and development of cold chains in meat and poultry processing sector.
- 34.11 Policy 264: It is high time we give the jackfruit its due recognition. The versatile fruit of Kerala 'Jack', once Kerala's life-saver in months of scarcity, has immense scope for value addition.
- 34.12 Policy 265: The provisions of the National Mission on Food Processing (NMFP) has to be utilised for the development of food processing sector, which in turn would help in Increase in farm productivity thereby increase in farmers' income.
- 34.13 Policy 266: Small Farmers Agri-business Consortium (SFAC) should be strengthened to support the initiatives on value addition in the State.

- 35.5 Policy 267: The food sector both requires energy and can produce energy — an energy-smart approach to agriculture offers a way to take better advantage of this dual relationship between energy and food.
- 35.6 Policy 268: Using local renewable energy resources along the entire food chain can help improve energy access, diversify farm and food processing revenues, avoid disposal of waste products, reduce dependence on fossil fuels and greenhouse gas emissions, and help achieve sustainable development goals
- 35.7 Policy 269: The government should promote 'conservation agriculture' which replaces mechanical soil tillage by 'biological tillage' for reducing the energy requirement and making farming sustainable.

- 35.8 Policy 270: Huge volumes of agricultural wastes in the form of livestock manure, kitchen wastes, rice husks, etc., can be converted into potential sources of energy and the resultant biogas can be plowed back into agricultural production and processing activities.
- 35.9 Policy 271: The use of wind power for agricultural production activities is practically adaptable for residents located along coastlines Kerala.
- 35.10 Policy 272: Establishment of solar and wind hybrid power generating equipments wherever possible will reduce the power requirement for agriculture to a great extent.
- 35.11 Policy 273: An incentive is to be provided for the farmers who runs an Energy Smart Farm for the promotion of energy smart agriculture.
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36. Policies related to High Tech farming

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- 36.3 Policy 274: Promotion of high-tech agriculture is important as climatic extremes are affecting normal cultivation.
- 36.4 Policy 275: Starting with a market study to determine the crops that will fetch a good price in a particular season and go for Hi Tech Farming of the same would assure huge profits to farmers.
- 36.5 Policy 276: The produces got from poly houses could be branded as safe to eat since they are produced in insect free conditions which eliminates the chance of using pesticides.
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37. Policies for farm information and communication

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- 37.5 Policy 277: The prestigious publication 'Kerala Karshakan' has to ensure greater accuracy and coverage regarding the newer technologies and could be used by the farmers for further reference.
- 37.6 Policy 278: Establishment of 'Virtual Class Rooms' to link Educational Institutions like Agricultural Universities both within and abroad for dissemination of best practices in agriculture.
- 37.7 Policy 279: Most of the extension services to farmers could be automated to reduce weakness of human factors in communicating information with minimum language, technical and socio-economic barriers.
- 37.8 Policy 280: Support to KISSAN KERALA.NET is to be extended to keep up its professional standards.
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38. Agricultural planning and budgeting related policies

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- 38.2 Policy 281: Agriculture will continue to be the first priority for the Government.
- 38.3 Policy 282: A separate agricultural budget should be presented for greater thrust and allocation of funds and schemes on agriculture.
- 38.4 Policy 283: While formulating the Departmental programmes, a regional plan at the watershed basis should form the basis for planning every year.
- 38.5 Policy 284: Sufficient allocation for agriculture should be made in the LSG budgets at least 40%, and that should be made mandatory for assuring the farmers, the assistance they need.

- 39.3 Policy 285: The Department of Agriculture will be modernised and renamed as ‘Agriculture Development and Farmers’ Welfare Department’.
- 39.4 Policy 286: The Department of Agriculture must continue to rely upon the most versatile form of decentralized Grama Panchayat level Krishibhavan offices and staff support has to be re-organised based on work load and number of farm families.
- 39.5 Policy 287: Make the Department a better place for employees to carry out their jobs of serving farmers will result in a more productive and satisfied work force.
- 39.6 Policy 288: The methods used for technology dissemination and personal approaches are to be restructured in lieu of the changing face of the ICT based tools, instruments and techniques.
- 39.7 Policy 289: The state level monitoring of Decentralised planning programmes have to be monitored by the Department of Agriculture by creating a separate wing which work hand in hand with LSGD Department and KILA.
- 39.8 Policy 290: A 'Knowledge Centre' at the district level has to be constructed for effective farm advisory services and empowering the small farmers with technology.
- 39.9 Policy 291: The Department aims at establishing effective formal liaison and cooperation with all institutions involved in agricultural development in the State.
- 39.10 Policy 292: The staff pattern of the Assistant Directors' Office is to be strengthened by providing additional man power support depending up on the work load of the Office.
- 39.11 Policy 293: Modernization at all levels of the Department including administration, communication, reporting, technology transfer, scheme administration, implementation, feedback, monitoring and midterm correction should be the motto of the Government.
- 39.12 Policy 294: The auditing system followed in the Department needs a thorough reorientation for improving the Departmental Quality Management System.
- 39.13 Policy 295: A Department of Agriculture Manual is to be published by the Government immediately to provide guidance and serve as a reference to employees which will result in the efficiency improvement.
- 39.14 Policy 296: The District Soil Test Laboratories under the Department of Agriculture play an important role in the soil test based nutrient application and they have to be strengthened as Soil Plant Health Clinics for including the diagnostic services along with analytical service.
- 39.15 Policy 297: Fertiliser Quality Control Laboratories are to be strengthened or upgraded to give accurate results in minimum time so that the farmers are assured of good quality fertilisers.
- 39.16 Policy 298: The bio control agents and parasites used in the biological control of pests and diseases are to be made freely available to the farmers of the State by strengthening the State Bio- Control Laboratory and developing the Parasite Breeding Stations as its sub-centres for the mass multiplication.

- 39.17 Policy 299: The The Bio-technology and Model Floriculture Centre (BMFC), Kazhakuttam functioning under the Department of Agriculture is to be upgraded as a Centre of Excellence with semi - autonomous powers.
- 39.18 Policy 300: Strengthening the Department's Agricultural Engineering Division by providing it the necessary technical and engineering support to carry out the smooth and expeditious implementation of mechanisation, popularisation of improved machinery and agricultural infrastructure projects.
- 39.19 Policy 301: An adaptive research mandate should be attributed to the Department of Agriculture to carry out research on location specific technologies in the farmers fields.

40. Revamping Animal Husbandry Department for better service delivery

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- 40.5 Policy 302: It is proven beyond doubt that to maintain the quality of performance and efficiency of key activities, staff attitude and behavior has a major contribution and this principle is to be put in practice at the earliest.
- 40.6 Policy 303: The Animal Husbandry Department staff can be classified into general staff and those having a specialized knowledge and skill, to maintain the quality of performance and efficiency of key activities.
- 40.7 Policy 304: Establishment of Department level service providers at the Taluk level for better monitoring and effective plan formulation and implementation
- 40.8 Policy 305: Quality should be ensured in all Government purchases of drugs rather than low cost to assure the farmers good drugs.

41. State agricultural research policy

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- 41.5 Policy 306: The Kerala Agricultural University has to redefine its mission, taking into consideration the present stage of agriculture scenario in the State.
- 41.6 Policy 307: The debt burden of the University has to be addressed by the Government by providing a one time grant.
- 41.7 Policy 308: The present practice of proliferation of agricultural universities through creation of new universities, campuses, colleges and through bifurcation of existing universities is indeed counterproductive and not in the interest of quality education.
- 41.8 Policy 309: The state government must ensure proper financial support to the agricultural university by allocating at least 15 per cent of the total budget of the departments of agriculture, animal husbandry, fishery, social forestry and any other related to agriculture additionally.
- 41.9 Policy 310: The disciplines and emerging areas must find a place in the teaching programmes of the agricultural universities.
- 42.10 Policy 311: A favourable environment is to be created in the University for improving the quality in research.
- 41.11 Policy 312: The research needs to be redefined based on the technological advancements and farmers' requirements.
- 41.12 Policy 313: The University should focus on the new areas of research.
- 41.13 Policy 314: The Agricultural University is to be made a goal oriented organization and the autonomous nature of the institution is to be assured by making improvements in the general administration focussing only on research accomplishments. ICAR Model Act should be enacted soon.

42. Policies for research prioritization in livestock sector	180
42.3 Policy 315: If past changes in demand for livestock products have been met by a combination of conventional techniques, such as breed substitution, cross-breeding and within-breed selection, future changes are likely to be met increasingly from new techniques	
42.4 Policy 316: A considerable body of work exists associated with the dynamics of digestion, and feed intake and animal performance and has to be undertaken by the KVASU.	
42.5 Policy 317: The infectious disease threat will remain diverse and dynamic, and combating the emergence of completely unexpected diseases will require detection systems that are flexible and adaptable in the face of change.	
42.6 Policy 318: Compared with the biophysical environment, the social and cultural contexts of livestock and livestock production are probably not that well understood and an integrated research approach is needed on this line.	

43. Policies for motivating farmers	182
43.3 Policy 319: The state agricultural awards must be distributed in the same week along with the 'Farmers Day' celebration in every two years	
43.4 Policy 320: The selection criteria should be modified and codified based on the modern principles and assessment should be done impartially and flaw free.	

44. Bio Technology and GM crops related policies	183
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45. Policies for empowering weaker sections	184
45.4 Policy 321: The Government should soon take urgent steps for reviving traditional agricultural sector of tribals by a massive programme combining the traditional knowledge and modern technologies.	
45.5 Policy 322: Appropriate farm tools, improved crops, integrated pest management techniques, conservation agriculture, biological nitrogen fixation and other context-specific technologies should be targeted for development and for enhanced access by women.	

46. Policies for streamlining PSUs in agriculture sector	186
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46.2 Policy 323: Radical change is necessary to make PSU's functioning more farmer and consumer friendly and no more PSUs are to be made in the light of FPOs.

CONCLUSION