



RNR SECTOR

**Major Achievements and Interventions
(2018-2022)**

**Policy & Planning Division
MINISTRY OF AGRICULTURE & FORESTS**

RNR Sector GDP growth

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------|-----------------|-----------------|------------------|-----------------|-------------|
| % of GDP | 15.99 | 15.82 | 19.15 | 19.19 | |
| Value | Nu. 26,759.75 M | Nu. 28,184.45 M | Nu. 32,997.445 M | Nu. 36,036.73 M | |

Key Policies and Strategies Developed and Implemented during 12th plan.

The RNR Sector has developed following key policies and strategies:

- **Revision of FNS policy 2014.**
- **Drafted RNR Strategy 2030**
- **Developed RNR Marketing strategy 2021**
- **Developed Food System Pathways**
- **Incentive Scheme for Market led Production**
- **Revised Cost Sharing Mechanism Guidelines**
- **Crop Prioritization**

Major initiatives/ achievements in last four years

1. Department of Agriculture (DoA)

| Sl.no | Activity | Achievement 2018-2019 | Achievement 2019-2020 | Achievement 2020-2021 | Achievement 2021-2022 |
|-------|--|---|---|--|--|
| 1 | Number of Greenhouse Supplied | | 3269 (ECP) | 1256 Nos | 594 Nos |
| 2 | Agriculture Land Development NSSC | 530 acres | 2680.43 acres | 4564.35 acres | 1100.42 acres |
| 3 | Fallow land (Wet land) revival | 583 Acres | 558.7 Acres | 2747.27 Acres | 521.88 acres |
| 4 | Area brought under sustainable land management | 1499 Acres | 315.9 Acres | 752.02 Acres | 449.89 acres |
| 5 | Area brought under farm mechanization | | 1358.43 Acres | 13,372.06 Acres | 6450 acres |
| 6 | Commercial farm initiatives by cooperative groups and FMCL | 1 FMCL | 53 commercial agriculture farms under ECP and 3 commercial agriculture farms (FMCL) | 3 FMCL | 5 commercial farms under FMCL |
| 7 | Electric Fencing | 771.91 km | 275 km | 620.72 Km | 288.8 km |
| 8 | Construction/renovation of Irrigation schemes (New Construction/Major renovation) | | 80.6 km | 152.54 Km | 56.26 km |
| 9 | Fertilizers supplied | 3048.93 MT | 3375.16 MT | 3604. 1 MT | 2196.52 MT |
| 10 | Agro-chemicals (Herbicides and pesticides) supplied **total amount of pesticides is inclusive of nontoxic pesticides and bio-pesticides | Herbicide (505 MT) Pesticides (18.25 MT) | Herbicides (458.81 MT) Pesticides (13.89 MT) | Herbicides (405.19 MT) Pesticides (25.5 MT) | Herbicides: (510.70 MT) (Pesticide) 23.43 MT) |
| 11 | Organic Fertilizer and Manure | | | 542.79 MT | 1640 MT |

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| 12 | Micro Irrigation System for dry land Irrigation | 575.51 acres | 720 acres | 512.25 acres | 529 acres |
| 13 | Supply of improved temperate fruit seedlings (Apple, Peach, Plum, Pear and persimmon) | 14,645 Nos. | 34,712 nos. | 28,180 nos. | 3,72,71 nos. |
| 14 | Supply of Vegetable seeds | 9.5409 MT | 18.21 MT | 18.74 MT | 11.04 MT |

2. Department of Livestock (DoL)

| SI No | Major Activity | Achievements | | | |
|--|--|--------------|------------|--|------------|
| | | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
| Major Infrastructure Developments | | | | | |
| 1 | Biogas plant established for farmers to promote green livestock farming practices | 414 Nos. | 1012 Nos. | 705 Nos. | 420 |
| 2 | Establishment of Animal Nutrition Sub-station in Sarpang to cater the extended services in southern Bhutan | | | Construction was completed and is fully operational | NA |
| 3 | Construction of weaner pool at RPPBC Lingmithang to capacitate additional production of piglets in the country | | | Construction is completed. The farm will soon stock additional GP stock to produce PS for distribution to contract farmers for piglet production | NA |
| 4 | Extension of Layer production | | | The shed extension was | NA |

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| | capacity was completed with extension of farms in NPRDC Sarpang and RPBC Khangku with transfer of Broiler mandates to BLDCL | | | completed. The extended farms are now operations with increased capacity (Layer production capacity at NPRDC: 12,000 and RPBC Layer Production Capacity: 10,000) | |
| 5 | Native Pig Breeding Program was initiated with provision of additional infrastructure in Gelephu | | | An additional shed to house native pigs was established in NPiRDC Gelephu. | NA |

Livestock Enterprises Established

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| 6 | Yak-based enterprises established to promote livelihood of highlanders | | 3 Cooperatives in Paro, Haa and Bumthang | 1 National Yak Federation instituted | Yak wool processing initiated in Merak and Sakteng, Tashigang |
| 7 | Livestock Enterprises established to enhance formalized value chain production | 1 Dairy Enterprise Established (Heifer Production Enterprise as a part of Breed Intensification program) 1 Forage Enterprise was established in Zhemgang | 1 Chevon Enterprise was established in Chhukha. 1 Honey Enterprise was established in Tsirang and Dagana | Piggery and Poultry Enterprise was established under BTI (15 Layer Farms, 45 Broiler Farms, 57 Piggery Breeding Farms) | Second phase BTI supported establishment of commercial poultry (24 Layer farm and 14 Broiler farms) and piggery breeding farm (23 breeder farms). 61 youths were directly engaged in these enterprises . |

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| | | involving 21 youth | | | |
| Input Production Supplied | | | | | |
| 8 | Layer Day-old Chicks (DOCs for Egg production) supplied to farmers | 449,907 Nos. | 448,369 Nos. | 441,155 Nos. | 652521 nos produced and distributed |
| 9 | Broiler Day-old Chicks (DOCs for Chicken production) supplied to farmers | 425,307 Nos. | 599,440 Nos. | 760,212 Nos. | Broiler mandate is transferred to BLDCCL on 9 November, 2020 |
| 10 | Piglets supplied to farmers for pork production | 4935 Nos. | 4180 Nos. | 9139 Nos. | 14608 nos produced and distributed |
| 11 | Fingerlings supplied to farmers for table fish production | 1,218,660 Nos. | 2,298,852 Nos. | 1,456,948 Nos. | 2775894 nos produced and distributed |
| 12 | Bulls/heifers supplied for farmers for enhanced milk production | - | 142 Heifers/Bulls Produced and Supplied | 18 Heifers/Bulls Produced and Supplied | 19 Bulls/heifers produced and distributed |
| Livestock Production Achieved | | | | | |
| 13 | Milk Production | 52,816 MT | 57,872 MT | 58,197 MT | 56196 MT |
| 14 | Chicken Production | 1687 MT | 1926 MT | 1835 MT | 2123 MT |
| 15 | Egg Production | 125 million | 141.3 million | 172 million | 156.41 million |
| 16 | Cheese Production | 3900 MT | 4090 MT | 4219 MT | 3154 MT |
| 17 | Pork Production | 972 MT | 1113 MT | 878 MT | 1189 MT |
| 18 | Butter Production | 2000 MT | 2126 MT | 2096 MT | 1929 MT |

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| 19 | Chevon Production | 257 MT | 281 MT | 295 MT | 206 MT |
| 20 | Frozen Semen produced and distribution for dairy breed intensification program | | 17,651 Doses of convention semen produced and distributed | 3150 Doses of sexed semen procured and distributed | 10042 doses of frozen semen produced and distributed |
| Achievements in Livestock Services and Research | | | | | |
| 21 | Total number of animal notifiable diseases reduced | 30 | 21 | 20 | 18 |
| 22 | Animal Health Services Client Satisfaction rate | 88.7% | 83.55% | 86% | 89% |
| 23 | Improved pasture and winter fodder developed | 20,000 acres | 21369 acres | 29005 acres | 30000 acres |
| 24 | Veterinary Cold Chain facilities established | | | Established in all 20 DVH and RLDCs | NA |
| 25 | Livestock research papers published annually | 13 Nos. | 23 Nos. | 16 Nos. *(available online ojs.moaf.gov.bt) | 22 numbers published in Bhutan Journal of Animal Science |
| 26 | Livestock Technologies developed and disseminated in the field | 3 new technologies were disseminated | 5 new technologies were disseminated (CNVR Approach towards dog population control, Humpsore treatment regime developed and disseminated, | 3 new technologies disseminated (sexed semen technology, TMR, Caciocavallo Cheese Production) | Highland Oat released Clean milk production in Dzongkha version Yak Farming, Product Launching and marketing |

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| | | | CHBPP as a socio-economic approach for farmers to enhance livelihood, Commercial Broiler hybrids, Biosecurity measures adopted in all commercial farms) | | Clean Milk Production in Yaks in Dzongkha version |
| 27 | Conserved Forage Production | 14732 MT | 27710 MT | 28,100 MT | 214531 |

3. Department of Forest and Park Services (DoFPS)

| Sl. No | Activities | Remarks |
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| 1 | Second National Forest Inventory field works completed and data analysis and report writing on-going | Funded by REDD+, GCF, BFL, GEF, Vanishing Treasures (BTF) |
| 2 | Second National Tiger Survey Completed and data analysis and report writing on-going | Funded through Vanishing Treasures Program |
| 3 | 4 numbers of RNR based Forestry Enterprise established | 2 in Gasa, 1 in Dagana, 1 in Trashiyangtse, 1 in Dramtse. |
| 4 | 17 numbers of Eco-tourism products developed | Cumulative of last four years |
| 5 | 2540 ha of State Reserve Forest Land brought under effective watershed management | Cumulative of last four years |
| 6 | 392363 ha of State Reserve Forest Land brought under sustainable Management Regime | Community Forest, Local Forest Management Areas and Forest Management Units |
| 7 | Forest capacity of net carbon sequestration maintained at 8.37 million tons of CO ₂ absorption annually | FREL document of Bhutan submitted to UNFCCC |

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| 8 | 21 numbers of Forestry Research in Policy, Technology and Biodiversity conducted. | Cumulative of last four years |
| 9 | 4 numbers of Highland enterprise developed | 1 in Laya, 1 in Merak, 1 in Drageytshitog, 1 in Gasa. |
| 10 | The Department allocated approximately 8227733.83 m ³ of timber in standing form as rural timber at subsidized rate to rural people. | Cumulative of last three years |
| 11 | A total of 15777444 m ³ of timber in standing form has been allocated to NRDCL for commercial extraction from FMUs and other adhoc areas. | RGoB & NRDCL (Cumulative of last four years) |
| 12 | The Department also allocated around 10951.38 m ³ of timber in standing form for construction and renovation of Dzongs and Lhakhangs | Cumulative of last four years |
| 13 | 57 new Local Forest Management area plans were developed | RGoB, GEF, REDD+ (Cumulative of last four years) |
| 14 | Khengzore Forest Management Units established as a new FMU in Pema Gatshel Dzongkhag. | |
| 15 | Sustainable Forest Management Plans of 9 Forest Management Units with an annual AAC of 69666 m ³ in standing volume were revised. | RGoB, GEF |
| 16 | Emission Reference Level has been submitted to UNFCCC | REDD+ |
| 17 | Forest and Nature Conservation Code of Best Management Practices of Bhutan, 2021 developed and published. | REDD+ |
| 18 | Spatial Decision Support System was launched and rolled out to field offices for implementation. | REDD+ |
| 19 | Various trainings in sustainable forest management like FMU inventory, National Forest Inventory, GIS, SDSS, Silviculture etc imparted to field divisions. | REDD+, RGoB, ARDCARP. |
| 20 | Developed Ecotourism strategy | |
| 21 | 1. Development of HWC Management Strategy, 2. Piloting different fences such as coral for livestock protection in Paro and Haa, use of plastic poles for electric fencing, Live fencing and chain link fencing. | Human wildlife conflict mitigation activities |
| 22 | Conservation Action Plan for Red Panda, Elephant, Paphiopedilum and Black-necked Cranes developed | Conservation action plans for key species |
| 23 | Completed the management zoning of protected areas using the new zonation guidelines for zonation of PAs into core, transition, buffer and multiple-use zones | Management effectiveness of Protected areas |
| 24 | CA TS assessment completed for JDNP, JSWNP and RMNP and accredited JSWNP and RMNP as CA TS approved sites | Management effectiveness of Protected areas |
| 25 | 661.93 Ha of Wildlife Habitat brought under scientific management using the new habitat management guidelines | Area under habitat management |
| 26 | 1. Study on Distribution and winter habitat use of Bhutan Takin, <i>Budorcas taxicolor whitei</i> in Bhutan completed | Biodiversity Species research |

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| | <ol style="list-style-type: none"> 2. Red panda survey in JKSNR and forest divisions of Dagana, Gedu and Samtse Completed 3. National Biodiversity Monitoring Protocol developed | |
| 27 | Advocacy on CITES requirement completed for DoFPS staffs & Report to CITES Secretariat submitted in accordance with the Multilateral Agreement of the UN Convention | Convention on International Trade of Endangered Species of Fauna & Flora (CITES) implementation |
| 28 | Carried our wildlife disease surveillance for Takin, Ghoral, wildpig | Wildlife disease surveillance |
| 29 | Removal of feral dogs from the periphery of Thimphu Thromde and the crane roosting areas in Phobjikha | Addressing Feral Dog Problem |
| 30 | <ol style="list-style-type: none"> 1. Wildlife Rescue focal were identified in all the field offices. 2. Rescue team in all the field offices were trained to attend to wildlife rescue cases in their respective areas. 3. Equipment for wildlife rescue and tranquilization were procured and issued to all field offices. | Capacity building of field staff on Wildlife restraint, drug handling and animal rescue operation |
| 31 | Based on the request from DoL, the Wildlife Rescue Team from NCD conducted two rounds of training on handling Dart gun, drug preparation, safety measures and maintenance | Training of De-suups for the Accelerated Dog Population Management |
| 32 | Construction of Boundary Wall at Motab Go (Mathang Guri) | BTC Nu. 8 million from UNEP |
| 33 | As part of HWC: Semso for 150 farmers who lost thier livestock to tigers in two Dzongkhags (Trongsa and Bumthang) | Paid UNEP |
| 34 | Supplied 5 power tillers as part of Human-tiger conflict mitigation measures in five chiwogs of Nubi gewog, hot spot of tiger human conflicts in Bhutan. | Nu.1.325 Million from UNEP |
| 35 | 3 km Electric fencing in Trongsa Human-tiger conflict mitigation measures | Nu. 0.909 Million from UNEP |
| 36 | 20 acres of habitat improvement in Trashigang Division, | Nu. 1 Million from UNEP |
| 37 | Construction of 3.7 km eco-trail in Trashigang Divsion | Nu. 2 Million rom UNEP |
| 38 | Collared 4 tigers and three leopards to study the movement of tigers and leopards | |
| 39 | Second nationwide tiger survey (2021-2022) under way. | Completed |
| 40 | Developed SAFE strategy for Human-Tiger Conflcits | |
| 41 | Published the tiger book, “Who am I?” for school children. | |
| 42 | Published the “The Cats Atlast of Bhutan”. | |
| 43 | Completed assessment of 19 sub-watersheds in Sarpang dzongkhag including Mou-basin through GEF-LDCF funding. | WMD |
| 44 | Development and implementation of management interventions in degraded watersheds in Sarpang Dzongkhag (Balukhola, Raidara and Mougang) | GEF-LDCF and Water Flagship |
| 45 | Plantation and soil conservation measures in Jigmechhoking Geog, sarpang. | GEF-LDCF |
| 46 | Implementation of watershed management intervention in Zhemgang (Wangdigang-Dechugang | GEF-LDCF funding |

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| 47 | Improvement of degraded watershed condition through plantation of native species (10 Ha) | GEF-LDCF funding |
| 48 | Improvement of waste management structure in Dechugang to avert pollution and spring contamination for downstream users. | GEF-LDCF funding |
| 49 | Pasture improvement in Wangdigang (Mithun farm) to reduce pressure on the water source areas. | GEF-LDCF funding |
| 50 | Assessment of watershed under Langthel and Korphu Geog in Trongsa | GEF-LDCF funding |
| 51 | Assessment and designing of watershed intervention for the proposed integrated water supply Okulum watershed in Toeb, Geog Punakha | As a part of ACREWAS project. |
| 52 | Assessment and designing of watershed interventions for the integrated water supply for new Gasa town from Zamjana/Shingtalum watershed (Khatoed) | As a part of ACREWAS project. |
| 53 | Assessment and designing of watershed interventions for the integrated water supply in five geogs in Tsirang from Kuchikhola watershed, Tsirang | As a part of ACREWAS project. |
| 54 | Assessment and designing of watershed interventions for the integrated water supply project in Sergithang Geog from Larichhu watershed. | As a part of ACREWAS project. |
| 55 | Support Paro Division in carrying out assessment and development of Dopshari watershed management intervention in Paro | |
| 56 | Implementation of spring revival measures at Lholing under Shaba Geog, Paro (mapping of recharge areas for dried up and drying water sources, implementation of revival measures, and installation of data loggers) in collaboration with Paro TFD and dzongkhag. | GEF-LDCF, REDD+ /GCF Funding |
| 57 | Mapping of Luetsho and Gangab water source in Nisho Geog, Wangdue for designing revival measures. | SPCR & GEF-LDCF funding |
| 58 | Training on springshed management (Hydro geological mapping to field staffs) | In collaboration with ICIMOD & ACWADAM |
| 59 | Mapping of water sources covering 7399 water sources across the country (report) and report published | GEF-LDCF, REDD+ and BFL funding. |
| 60 | Training of Samtse Division staffs on hydro geological mapping and climate data analysis. | WMD & CFLI funding support |
| 61 | Developed framework for wetland assessment in the country. | BFL/REDD+ funding |
| 62 | Development of management intervention for 3 RAMSAR sites (Gangtey-Phobji, Khotokha and Bumdeling) | BFL funding |
| 63 | Renewal of PES scheme in Pasakha and Mongar (Yakpugang) completed. | GEF-LDCF and REDD+ |
| 64 | Established PES scheme to protect Pawkhola-Kuchi watershed in Tsirang dzongkhag between Damphu residence and Thakorling Geog. | |
| 65 | Detail assessment of Namay Nichu PES for the renewal of PES contract term. | GEF-LDCF |

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| 66 | Support initiation of PES scheme in Gelephug. | complete |
| 67 | REDD+ Strategy & Action plan along with REDD+ Fund mobilization Strategy, Feasibility, Cost & Benefit Analysis for the REDD+ Strategy implementation and Benefit sharing framework for REDD+ Strategy implementation published | |
| 68 | <ol style="list-style-type: none"> 1. Safeguard framework finalized and published 2. Grievance Redressal Mechanism for REDD+ published | |
| 69 | <ol style="list-style-type: none"> 1. Formation of NWFP management group in Paro. 2. Sustainable harvesting of Medicinal & Aromatic Plants supported to NWFP management groups at Soe & Soe Yaksa under JDNP. | Support development of management plans for formation of new NWFP management groups |
| 70 | <ol style="list-style-type: none"> 3. Communities of Tashiling NWFP management groups trained on post-harvest technique on broom making 4. 2. Members of Devithan group trained on bamboo shoot & Ama pickle processing. | Small scale community-based enterprises supported in Tsirang & Samtse Forest Division |
| 71 | Pictorial guide for important NWFPs developed to help sustainable management planning and domestication. | |
| 72 | <ol style="list-style-type: none"> 1. Supported Small scale community-based enterprises for Amla enterprise in Dozam CF, Dremitse, Mongar Division. 2. Procured and distributed cane & bamboo product making equipment. | The procured tools will be issued to the CF & NWFP group of Dagana, Sarpang, Mongar, Tsirang & Lhuntse Dzongkhags. |
| 73 | <ol style="list-style-type: none"> 1. Evaluation of the National NWFP Strategy 2. Revised the National NWFP Strategy 3. Developed the survey, data analysis and report writing protocol (CITES Format) for Pangpoe. | |
| 74 | <ol style="list-style-type: none"> 1. Reviewed 229 Community Forest Management Plan 2. Preparation of 28 new CF Management Plan. | |
| 75 | Trained CFMG members on furniture making in collaboration with TTI, Chumey, Bumthang | WWF Fund support |
| 76 | <ol style="list-style-type: none"> 1. 2 PES based Forestry Enterprise established in Gasa 2. Identification, consultation and proposal evaluation for 14 proposals on Ecotourism, PES, Community-based wood enterprise, NWFP enterprises through AFoCO project financing | |
| 77 | <ol style="list-style-type: none"> 1. Conducted practical training for 27 CFMG members on Silviculture in Blue Pine Forests 2. Conducted practical training for 30 Field Foresters including 5 female Foresters on Resource Assessment in CFs <p>Conducted Good Governance in CF Management for 21 CFMG members including 11 female members</p> | Capacity Building Program through AFoCO Project |
| 78 | Documented nationwide plantation Impact assessment | |
| 79 | 142.49 ha maintenance carried out for the last four years to get maximum survival of the plantation created during the year 2017. | |

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| 80 | Royal Bhutan Police personnel in 13 Integrated Check gates trained in import/export monitoring of NWFP. | |
| 81 | Published National Plantation Strategy 2019 | |
| 82 | Published Monitoring and Evaluation Guidelines for plantation | |
| 83 | <ol style="list-style-type: none"> 1. Establishment of Agroforestry Technical Steering Committee within MoaF (Specialists - DoFPS, DOL, DOA) 2. Networking and Collaboration with local and regional network of agroforestry practitioners (Darla Agroforestry Research Sub-Center, UWICER, World Agroforestry Center, iCRAF) 3. Monitor and collaborate with Darla Agroforestry Research Sub-Center, UWICER on agroforestry research and piloting. | Collaboration and coordination with stakeholders and partners |
| 84 | <ol style="list-style-type: none"> 1. documented the traditional agroforestry practices in the country – case studies from 10 dzongkhags. 2. Developed the agroforestry guideline (document) 3. Developed the draft agroforestry strategy 4. Collaborate with Darla Agroforestry Research Sub-Center, UWICER in supporting farmers in Chukkha dozongkhag. | Support from GEF |
| 85 | <ol style="list-style-type: none"> 1. Technically support the development of the HIHI project with MOAF with agroforestry activities. 2. Development of Food composition table and dietary energy assessment with agroforestry components. 3. Development of the climate change adaptation and mitigation plan for the department (mainstreaming agroforestry program). 4. Development of National Organic Strategy - forestry sector contributions. 5. Coordination and Implementation of National Organic Flagship Program activities within DoFPS (Neem plantation and enhancing lemongrass value chain). 6. Organic certification of lemongrass areas in the community forests in Mongar and Tashigang. | Integration of agroforestry programs and coordination with stakeholders and partners |
| 86 | <ol style="list-style-type: none"> 1. Technically assisted in developing the bio esthetic plan for implementation. 2. Technically backstop (provide suitable species list and availability of the seedlings) in site development (greening) of all five National Service Academies. 3. Technically assist in establishing agroforestry sites in the five National Service Academies. 4. Development of agroforestry curriculum and modules. | Technical support to National Service Academy |
| 87 | Interagency Forest Fire Coordination Group (IFFCG) initiated and Standard Operating Procedure developed for all forest-fire | |

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| | prone Dzongkhags of Paro, Thimphu, Wangdue, Tsirang, Bumthang, Mongar, Tashigang | |
| 88 | 56 surface collection and riverbed material dredging sites were operated covering around 1956 acres in SRF, private registered land operated by NRDCL, private companies, and DGM. | |
| 89 | National Zero Poaching Strategy adopted and implemented. Spatial Monitoring and Reporting Tool (SMART) technology adopted for forestry services and monitoring in all 14 DoFPS field offices | |
| 90 | Trained about 1017 people in various short courses. Trained 102 nature guides | Forestry theme-based trainings conducted including youth skilling program (Nature guide training) |
| 91 | Trained 100 foresters in the last 4 years (Professional forestry certificate course) | |
| 92 | Conducted research on propagation of NWFPs such as bamboo, orchids, agarwood and developed guidelines | Forest Technology Research |
| 93 | Established 5 long term environmental and socio-ecological monitoring plots to undertake long term study on vegetation change and soil dynamics. | |
| 94 | Developed Biomass and allometric equation for five tree species | |
| 95 | <ol style="list-style-type: none"> 1. Conducted research on key species such as Dhole, Macaca munzala, Hornbills, Back-necked cranes, Himalayan griffons, butterflies and moths. 2. Non-invasive monitoring of tigers, distribution and threats to marbled cats and local perceptions of Asiatic Black Bears | Research on conservation biology |
| 96 | Digitized 4535 important old governments books/documents/reports | |
| 97 | Issued 147 research clearances as of October 2021 through online research clearance system at the Institute. | |
| 98 | Constructed biomass processing chamber and dendro lab with state-of-the-art equipment at the institute. | |
| 99 | Implemented Himalayan Environmental Rhythms Observation and Evaluation System (HEROES) project across 14 schools distributed across different ecological zones. | |
| 100 | Report on identification and documentation of 167 medicinal plants used by local healers in the Country. | |
| 101 | Completed field work on hydrological, biodiversity, socio-cultural-economics of Chamkharchu basin. | Supported through BFL. Field work assisted by WCNP, PNP, BFD and ZFD. |
| 102 | Raised 30 Indian Peafowl using surrogate parent | |

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| 103 | Study on fire risk assessment undertaken in fire prone watershed. | |
| 104 | Developed strategies for National Adaptation Plan for forestry and water sector. | As TWG with NEC & UNDP |
| 105 | Completed campus landscaping and other structures such as nursery, orchidarium, green houses, campus fencing and restrooms. | |
| 106 | Assessed forest ecosystem services from different forest types: Oak Forest, FMU and community plantations | Collaborated with CIFOR, Indonesia |
| 107 | Completed ODE Exercise of DoFPS led by RCSC and staffing strength of all Divisions changed accordingly | |
| 108 | Completed implementation of the recommendation of ODE Exercise completed | |
| 109 | Revised some sections of the Forest and Nature Conservation Rules of Bhutan, 2017 (once in 2020 and in 2021) | In collaboration with Legal Section, MoAF. |
| 110 | Completed the Draft Forest and Nature Conservation Bill 2020 and submitted to the Parliament of Bhutan. | In collaboration with Legal Section, MoAF. |
| 111 | Allotment and export of River Bed Materials amounting to 2.9 million cubic meters | DoFPS and field offices |
| 112 | Assessment of effectiveness of protected areas and biological corridors using METT+ tool | Completed |
| 113 | Establishment of online forestry clearance system completed | REDD+ |

4. Department of Agricultural Marketing and Cooperatives (DAMC)

| SI No | Major Activity | Achievements | | | |
|-------|--|---|--|--|--|
| | | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
| 1 | Market Infrastructures | 5 Market Infrastructure established in various Dzongkhags | 17 various market infrastructures at various Dzongkhags | Construction of three Integrated Cold Stores under Economic Contingency Plan Sarpang, Wangduephodrang and Trashigang. 10 Market Facility establishment supported | 13 various market infrastructures established in various Dzongkhags. |
| 2 | Buy back (Incentive Scheme) of agriculture commodities | 50.286 MT of cardamom worth Nu.20.667 million benefitting 549 farmers | 160 MT worth of Nu.11.31 million (Cardamom, Quinoa, Rajma Bean, Maize) | 375.06 MT of Cabbage worth 7.9 Million 75.06 MT of Cabbage worth 7.9 million 80.696 MT of cereals worth 6.49 Million | 1340.4 MT of potato and ginger worth Nu. 331.9 million |

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| 3 | Registration of Farmers group and Cooperatives | 82 FG and Coop registered in Agriculture, livestock, forestry and non-RNR category | 99 FG and Coop registered in Agriculture, livestock, forestry and Non-RNR Category | Registered 1 Federation (Bhutan Yak Federation), 11 Co-operatives and 32 Farmer Groups. | Registered 58 FG and 4 Coops |
| 4 | Equipment Support | Nu. 5 million worth of value addition and packaging equipment benefiting about 30 FGs/Coop | Nu.4.14 million worth of equipment supported to 48 FGs/Coops | Nu.5.684 million worth of value addition equipment supported to 32 registered FGs/Coops | Nu. 12.00 million worth of value addition equipment supported to 43 registered FGs/Coops under various funding |
| 5 | Studies/Guidelines | 5 guidelines developed | Draft Bill on Cooperative act of Bhutan Amendment 2009 Value chain studies on Buckwheat, Maize and Asparagus | Marketing Strategy developed, Finalization of SOP for export and domestic marketing Draft guideline of Savings and Credit Cooperative developed | Developed Marketing Action Plan for 5 Dzongkhags (Pemagatshel, Chukha, Paro, Dagana, Sarpang) Value chain study carried out for winter chili and minor cereals (barley and millet). |
| 6 | Capacity Building | 925 members trained | 51 FGs/Coop consisting of 591 members trained | 853 members trained | 1455 members from 151 FGs/Coop on various training topics |
| 7 | Promote Export | 52258.35 MT worth Nu.2459.62 million | 60340.37 MT worth 3031.782 million | 42944.16 MT worth Nu. 2272.45 million | Facilitated 47232 MT of RNR products (Apple, Betle nut, Cardamom, Ginger, Potato and Vegetables) worth Nu. 1120.64 Million. |

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| 8 | School and Hospital Feeding program | 39 FGs/coops/L UCs linkages established with 32 schools/institutions/Bcoop shop/Traders | 203 schools linked with 175 FGs/Coops | linked 202 schools and hospitals with 298 FGs/Coops 162 school and 1 hospital linked with 281 producers. 161 Schools and 1 hospital renewed business linkages with 343 producers' group | Linked 350 schools and 5 hospitals with 470 FGs/Coops |
| 9 | Employment generation | 262 Self-employment, 13 paid employment | 67 paid employments in various FGs/Coops | 98 new paid jobs created in various FGs/Coops | 91 new paid jobs created in various FGs/Coops |
| 10 | Promote RNR based enterprise | | Paneer Processing Unit at Wangduephod rang | 10 RNR based enterprise established in collaboration with various Dzongkhag agencies | 12 RNR based enterprise established in collaboration with various Dzongkhag agencies |