

Suggested functional divisions of Animal
Husbandry and Veterinary Department,
Government of Assam with suggested role,
outcome, and indicators.

vis a vis

Sustainable Development Goal

Excerpts of Assam Vet Roadmap report

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Suggested functional divisions of Animal Husbandry and Veterinary Department, Government of Assam with suggested role, outcome and indicators.

Functional Divisions	Suggested Roles (Action Areas)	Output	Outcome / Result	Annual Performance Indicator of the department
<p>A. Veterinary Care</p> <p><i>Responsibility centers:</i></p> <ul style="list-style-type: none"> Veterinary hospitals / dispensaries / sub Centres. (including mobile facilities) 	<ol style="list-style-type: none"> To connect with, farmers' Pet owners and community-level institutions for assistance in improving the outreach of service delivery. E.g. Community organizations take an active part in organizing camp of farmers for a fixed periodic visit of the public veterinarian / Mobile clinic. To strengthen mobile units / set up boat clinic service for riverine areas / 24-hour Urban Animal ambulance service attached to static dispensaries/hospital for planned service delivery. To partner with private service providers / NGOs and strengthen veterinary service as a tool for productivity enhancement, e.g. Metabolic profiling of herd, deworming of village poultry and goat, etc. 	<p>Functioning list of community-level institutions who are working with the department for improved outreach of services.</p> <p>Well-equipped mobile units/boat clinic / urban ambulance that are attached to identified dispensaries for planned need-based service delivery.</p> <p>Functional laboratories/data management services that assist farmers to make productivity improvement related decisions.</p> <p>List of recognized private agri-clinics and NGOs providing</p>	<p>The decrease in the incidence of diseases (including production-related diseases)</p> <p>Functioning mobile units implementing outreach activities.</p> <p>Enhanced productivity of livestock farms.</p> <p>Adoption of good practices in animal care and welfare.</p> <p>Enhanced reporting of diseases.</p>	<p>The incidence of significant animal diseases should reduce by targeted percentage for each district.</p> <p>Percent adoption of listed good practices amongst sample farmers reaches the agreed target.</p> <p>Response time of disease investigation after reporting decreases with previous years as a baseline.</p>

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	<ol style="list-style-type: none"> 4. To facilitate service delivery by recognized private entities (including pet care concerns) 5. To educate and encourage people on early reporting of diseases and adoption of good practices for animal care and welfare. 6. To offer modern laboratory and surgical care services. (Curative services) 7. To build capacity at the community level for emergency services, including handling of disasters and use of validated ethnoveterinary practices. 8. To build and maintain the facility at strategic locations for the rehabilitation of rescued pet / wild and farm animals. 	<p>community-level services.</p> <p>Availability of mobile phone number of all field service delivery personnel in the public domain.</p> <p>Trained and functioning community institutions capable of handling disasters and first aid services.</p> <p>Functioning community schools that teach people on the use of validated ethnoveterinary practices.</p>	<p>Enhanced utilization of services of laboratories/ data management service providers.</p> <p>Strong community organization with the demonstrated capacity of handling disasters, disease control initiatives and first aid to animals.</p> <p>Adoption of validated traditional and ethnoveterinary practices.</p>	
<p>B. Epidemiology, disease control, and Public Health</p> <p><i>Responsibility centers:</i></p> <ul style="list-style-type: none"> • Disease Diagnostics Laboratories 	<ol style="list-style-type: none"> 1. To conduct a test, field investigations, etc. to understand the root causes of animal health and related public health issues and develop strategies to address the same. 	<p>Functional border control points / quarantine stations.</p> <p>Functional laboratories (Animal disease</p>	<p>Regular publication of seasonal bulletin /knowledge products for various situations and stakeholders.</p>	<p>Publication of minimum agreed to numbers of bulletins corresponding to seasons.</p>

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<ul style="list-style-type: none"> Veterinary Biologicals production units Veterinary hospital dispensaries / Sub centers. 	<ol style="list-style-type: none"> To oversee production and regular evaluation of biologicals and procurement of point of care diagnostics for priority animal diseases. To identify risky locations (including border control points) and practices, within populations and value chain players for focused intervention aimed at risk management. Manage border livestock trade and disease control infrastructures to safeguard local livestock trade from the inter-state spread of diseases. To analyze disease incidence trends and timely forecast for pre-emptive action. To assist the government of India in reporting disease status to the World Animal Health Organization (OIE) to facilitate the import/export of livestock products from India and to India. 	<p>and public health-related investigations)</p> <p>Functional and accredited biological production unit.</p> <p>Periodic published guide/knowledge product for field veterinarians on causal factors of observed diseases / public health issues and risk management thereof.</p> <p>Published knowledge product for farmers/farm sites / physical facilities and livestock product consumers.</p> <p>Referral support service to field veterinarians for disease investigation and control measures.</p> <p>Dynamic disease risk maps for planned and</p>	<p>Regular production of quality biologicals.</p> <p>Updated Standard Operating Procedures (SOPs) and risk maps.</p> <p>Documented investigation forecast and response reports capturing learning.</p> <p>A documented report of training and referral support provided to field veterinarians.</p> <p>Timely submission of Animal Disease and other reports to concerned authorities.</p>	<p>Minimum agreed percent of Targeted production and sale of biologicals.</p> <p>Minimum percent achievement (as agreed state-wise) of the target for the number of training conducted.</p> <p>100% need-based field investigation conducted.</p> <p>100% success in control measures (when there is an outbreak in any year)</p> <p>Minimum agreed to percent increase in an organized interaction program with private value chain players.</p>

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	<p>7. To oversee disease prevention, maintenance of disease-free zones/compartments, disaster mitigation, and control measures as per tailored/developed standard operating procedures (SOP).</p> <p>8. To monitor Adverse Veterinary Drug Reaction (ADR) and oversee mitigation measures for drug resistance and Anti-Microbial Resistance.</p> <p>9. To collaborate with the health department, veterinary experts of medical colleges for monitoring of zoonotic and other emerging human diseases</p> <p>10. Assess biological threats and collaborate for measures to mitigate such a threat.</p>	<p>timely investment on risk management.</p> <p>Functional support services for private investors to identify and operate in risk-prone areas.</p>		
C. Service standards control, Extension, Skilling and entrepreneurial support	<p>1. To engage with partners and community organizations to set up informal livestock farmer schools in</p>	<p>Functioning training facility within the department for farmers and professionals.</p>	<p>Established / MoUs with Agriculture Skill Council of India / SIPRD / KVKs / RSETI etc.</p>	<p>The number of master farmers/youth master trainers in any district increases</p>

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<p><i>Responsibility centers:</i></p> <ul style="list-style-type: none"> State Veterinary Council Institute (If any) for Livestock Entrepreneurship Management. Officers Training Institute. Vocational Training institutes. Livestock/poultry and fodder farms Farm schools (if any) Block Veterinary Dispensaries. Mobile care units <i>(in the context of disasters)</i> 	<p>each administrative unit like <i>Panchayat</i>.</p> <ol style="list-style-type: none"> To impart skill training to master farmers / and select youths at a department facility to support the trainer's need for informal farmer schools. To develop a partnership with regional /district/cluster level institutions capable of providing high-end entrepreneurial counseling / specialized on the field training and advisory services in commercial livestock farming and allied areas. To engage with private advisory/training institution/farm input dealers/farm integrators to create a cadre of agents to assist client entrepreneurs in Detailed Project Report (DPR) preparation and to establish linkages with financial institutions. To work with financial institutions for developing a decision support 	<p>MoU's with existing training providers, e.g. Extension Centres of the Department of Rural Development, KVKs, RSETI etc. for resource sharing.</p> <p>Skilled master trainers/agents capable of earning a livelihood through skill training and business development assistance.</p> <p>Institutions providing farm advisory services.</p> <p>Capable institutions for the training of youths in diverse skill areas such as farm supervisors, animal handlers, Pet groomers etc.</p> <p>Vibrant livestock / poultry / fodder farms.</p>	<p>Increase the number of skilled master trainers and business development agents.</p> <p>Increase the number of institutions providing farm business advisory services.</p> <p>Financial institutions utilizing developed Livestock Enterprise Decision Support System (LEDSS)</p> <p>Adoption and enforcement of veterinary practice regulations specified by the Veterinary Council from time to time.</p>	<p>by an agreed percent every year.</p> <p>Agreed percent of emerging/recognized clusters gets access to high-end farm advisory services (either private/public)</p> <p>Percent of livestock farmers expressing the desire to set up farms (as measured on a sample at district level) increases from the previous year.</p> <p>Food safety parameters improve from previous years.</p> <p>Adherence to Disaster response time for department as mandated by district disaster management authority.</p>

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	<p>system for farm-related enterprises.</p> <p>6. To set up round the clock technology demonstration and investment facilitation centers with call center facility.</p> <p>7. To train milk traders/meat handlers on hygiene/safety and brand building.</p> <p>8. To initiate farm internship programs for budding entrepreneurs and school children in Livestock/poultry/fodder farm and feed plants.</p> <p>9. To train, assist (welfare support) and build the capacity of farmers to face disasters, e.g., flood, drought.</p> <p>10. To promote women empowerment.</p> <p>11. To document and promote traditional rearing practices, integrated farming systems, and cost reduction measures.</p> <p>12. To facilitate knowledge networking with research institutions / NGOs, ensuring</p>	<p>Stored fodders/fodder blocks meant for distribution to farmers during disasters.</p> <p>A developed Livestock Enterprise Decision Support System (LEDSS)</p> <p>Designed CVME programs</p> <p>Functioning para-vet schools (Public and Private) offering para-vet courses.</p>		<p>A minimum agreed percentage of departmental veterinarians and para vets attends the CVME program in any year.</p>

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	<p>lab to land activities that can improve productivity and ensure environmental sustainability, e.g., water conservation, reduction in methane production in livestock, Biogas production.</p> <p>13. To facilitate Animal husbandry and veterinary education and innovative research, including the promotion of gene bank of indigenous breeds.</p> <p>14. To Facilitate the delivery of tailored Continuous Veterinary Medical Education (CVME) programs for veterinarians</p> <p>15. To impart standard skill training to para - vets through departmental and private institutes.</p>			
D. Promotion of livestock ownership, Livestock/poultry breeding support.	<p>1. To augment seed availability and ownership of livestock assets by farmers.</p> <p>2. To undertake/facilitate farm premise and animal identification for real-time advisory support to</p>	<p>Bio-secured Farms e.g. for the rearing of bulls.</p> <p>Quality semen straw.</p>	<p><i>Long term:</i></p> <p>Increase in population and average milk/meat/ egg production from crossbred animals / improved birds.</p>	<p>Percent coverage of AI increases by an agreed percentage per annum.</p> <p>Calf mortality is below the agreed percentage.</p>

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<p><i>Lead Responsibility:</i></p> <ul style="list-style-type: none"> State Livestock Development Agency Mother farms / Frozen Semen Production Centre. Artificial Insemination Centres / Sub centres. 	<p>farmers/producer groups through mobile devices and to ensure appropriate distribution of semen straws, availability of centralized data for progeny testing/program evaluation.</p> <ol style="list-style-type: none"> To create awareness on the benefit of artificial insemination and the pre-requisite for its success. To engage with breeders, producer groups, field vets and para-vets for performance-related data input. To maintain the facility for bull /buck/boar rearing and semen production as per certification requirement. To produce/procure liquid nitrogen for storage and distribution of semen straw. To identify growth areas for the breedable population and develop an efficient distribution network for the regular delivery of semen straws to such areas. 	<p>Tools and working software</p> <p>State of art storage and distribution system.</p> <p>Quality animal data</p> <p>Trained man-power</p>	<p>(As evident from sample survey)</p> <p>A renewed interest of people on the rearing of good quality indigenous animals.</p> <p><i>Short term:</i></p> <p>Increased consumption of A I straws produced from promoted facilities.</p> <p>Increase percent A I Coverage.</p> <p>Increase Percent of A I on local animals. (Those adopting the technology for the first time)</p> <p>Reduction in mortality of</p>	<p>Crossbred breedable animal availability increases by the agreed percentage per annum.</p> <p>The number of commercial breeding farms increases by the agreed percentage per annum.</p> <p>The population of indigenous animals increases in their respective breeding track.</p>

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	<ol style="list-style-type: none"> 8. To assist select government farms as model breeding farms (e.g., Calf to Heifer rearing model) 9. To promote setting up of model-assisted reproductive technology service centers. 10. To undertake/facilitate the organization of infertility camps. 11. To implement programs aimed at incentivizing scientific rearing of calf borne out of artificial insemination. 12. To undertake initiatives aimed at the conservation of indigenous breeds e.g., Bull rearing, prevention of inbreeding in select tracks of indigenous breeds. 13. To facilitate setting up of commercial breeding farms and trading of quality animals for breeding. 14. To provide need-based advisory services to private breeding units/parent farms. 15. To train veterinarians/para vets on breeding 		<p>calf borne out of AI.</p> <p>Increase in the number of commercial breeding farms.</p> <p>Increase in the number of areas covered for selective breeding of indigenous animals.</p>	

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	policy/ regulatory requirements/ Artificial insemination technique, management of breeding farms and related areas.			
<p>E. Enterprise, value chain development, risk support and Facilitation of Livestock/poultry product marketing and trade.</p> <p><i>Responsibility centres:</i></p> <p>Livestock and Poultry Corporation promoted by state governments.</p> <p>National Livestock Mission office.</p> <p>Livestock and Poultry farms.</p> <p>Block veterinary dispensaries.</p> <p>Public health laboratory under Collaborative Agreement between health and veterinary department.</p>	<ol style="list-style-type: none"> To register and maintain real-time database/map of private commercial farms, manufacturing, trade linked enterprises, processing and other livestock value chain related infrastructures. To implement a certification system (maybe outsourced) for interested enterprises for quality assurance. To dynamically generate information/map on cluster growth and notify clusters to promote vertical and horizontal integration and market linkage from the clusters. To provide credit linkage, business development / trade facilitation services to registered private enterprises. 	<p>A robust system that registers enterprises / infrastructure and develops cluster maps in real-time.</p> <p>Entrepreneurs growing with bank finance.</p> <p>Quality certified enterprises</p> <p>Documented meetings / engagements for facilitation of input availability.</p> <p>Running advertisement campaigns.</p> <p>Visible local brands. (specific to states)</p>	<p>Evidence of cluster growth.</p> <p>Successful promoted entrepreneurs / enterprises as measured by Return on Investment.</p> <p>Increase demand for locally produced livestock products. (As evident from sample survey)</p> <p>Better price realization by farmers and Reduce market linked conflicts.</p>	<p>Percent increase in client base receiving benefits.</p> <p>Minimum 60 % of sample clients who received services (related to concern functional area) of the department should rank their satisfaction of the department's services above 7 in the scale of 10.</p> <p>Minimum number of client contact programs.</p> <p>Minimum number of regional trade fairs (across a state)</p> <p>Percent increase in community assets. (under program</p>

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	<p>5. To protect farm animals against risk (Animal insurance)</p> <p>6. To promote the availability of quality farm input e.g. Feed, equipment etc. for commercial operations.</p> <p>7. To support the rejuvenation of Pasture lands, commercial fodder cultivation (including the promotion of cultivation of aromatic fodder grasses in riverine areas), production and marketing of fodder-based livestock feed e.g. silage</p> <p>8. Develop a generic advertisement campaign to promote locally produced livestock product / by-products. (Local brand building)</p> <p>9. To make a need-based market intervention to prevent unfair practices and to ensure healthy competition.</p> <p>10. To provide secretarial support to the price and standards committee in collaboration with processing sector</p>	<p>Documented meetings / engagements to prevent unfair practices and to ensure healthy competition.</p> <p>Notified minimum standards and price. PPP facilities / Promoted infrastructures.</p> <p>Documented engagement on trade / export facilitation.</p> <p>Trade fairs / Knowledge programs.</p> <p>Published knowledge products.</p> <p>Bio-security / Animal welfare compliance reports.</p>	<p>Reduce PPP Project execution time.</p> <p>Indicative trade growth. (As evident from market study)</p> <p>Increase welfare / bio-security compliance.</p>	supported by department)

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	<p>organizations and publish the minimum price of livestock products.</p> <p>11. To make public investment promoting facilities like Physical Livestock and livestock product markets, abattoirs, parent farms community slaughterhouse etc. essentially ensuring independent and profitable operations of the same.</p> <p>12. To promote the creation of infrastructures for livestock carcass and by-product utilization including production and promotion of bio-energy.</p> <p>13. To facilitate interstate trade/export of livestock and livestock products/by-products.</p> <p>14. To promote market innovation, knowledge sharing and networking by organizing fairs and training programs involving all value chain players.</p>	<p>Collaborative agreements with partners.</p> <p>Industry skill gap reports.</p>		

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	<p>15. To assist in health care and disease control related activities by ensuring the adoption of bio-security norms in all commercial operations and physical livestock markets.</p> <p>16. To promote animal welfare practices in commercial operations and ensure certification of the same.</p> <p>17. To implement Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act</p> <p>18. To set up community infrastructure for farm input distribution, modern milk collection (including other aggregation efforts) post-harvest management and access to low-cost energy.</p> <p>19. To collaborate with the National Productivity Council and Quality council of India to implement their</p>			

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	<p>programs within the livestock sector.</p> <p>20. To assist in skilling and extension function and in documenting the skill gap within the industry.</p> <p>21. To engage with NGOs for outsourcing specific public services and to monitor/guide their activities.</p>			
<p>F. Estate management, statistics and data handling, IT and knowledge support</p> <p><i>Responsibility centre:</i></p> <p>Planning division.</p> <p>Empowered Advisory group for Strategic Initiatives (To be constituted by state governments with sector experts and industry representatives)</p> <p>State Animal Identification Recording and Breeding Services Regulatory Authority– an authority within the department for the issue of unique animal</p>	<ol style="list-style-type: none"> To maintain Integrated Management Information System (Covering: Data, Asset, Human Resource). To procure / construct new, ensure protection and upkeep of estate property vehicles and infrastructures. To coordinate with DAHD, GOI for implementation of central sector schemes. To issue Unique Animal and Premises identification code and ensure data security and regulate data use/ breeding programs. To oversee farmer / enterprise registration 	<p>A functioning MIS</p> <p>Physical assets</p> <p>Unique ID codes for animal / farm premise registration.</p> <p>Data / memo / Reports / Print and e-Publications / websites / Social media presence/ Knowledge products.</p> <p>Human resource</p> <p>Generated revenue</p>	<p>MIS system supports process simplification, coordination between directorate and secretariat and ensures efficient monitoring of activities across districts.</p> <p>Asset protection and upkeep improves.</p> <p>Demand for animal identification goes up.</p>	<p>Percent success in commissioning of new infrastructure planned for the year.</p> <p>Percent expenditure against allocation improves.</p> <p>60% clients (Public / contractors etc.) rates departments performance above 7 in the scale of 10.</p> <p>Number of animal / premises identified increased by agreed percentage.</p>

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<p>and farm premises identification numbers and to regulate breeding.</p> <p>Establishment division</p> <p>Information and Publicity division.</p> <p>Statistics division</p> <p>Legal cell.</p> <p>Engineering Division</p> <p>IT cell</p>	<p>activities. (Functional area wise)</p> <p>6. To oversee recruitment and labor management (Functional area wise)</p> <p>7. To promote revenue generation from estate property.</p> <p>8. To oversee execution of contracts and legal cases (including RTIs)</p> <p>9. To ensure effective internal communication and coordination.</p> <p>10. To undertake monitoring and evaluation of plans and programs (including 3rd party review)</p> <p>11. To conduct an analysis of reports, memos and prepare plan and budget</p> <p>12. To maintain GIS support facility for assistance in planning, conduct census and sample surveys.</p> <p>13. To maintain records, website, social media accounts and library.</p> <p>14. To oversee events.</p> <p>15. To publish and distribute knowledge products.</p> <p>16. To set up a nodal contact office for PR.</p>	<p>Contracts and Agreements</p> <p>Plans and budgets.</p> <p>Organized events</p>	<p>Adequate number of Human resources recruited (or Vacancy situation improves)</p> <p>Government approval against submitted Plans improves relatively.</p> <p>Better monitoring and process simplification leads to efficient fund utilization.</p> <p>Successful events organized (as measured against outcome expected from each event)</p>	<p>Number of externally funded project / partnership increases by agreed percentage.</p> <p>Any other performance indicator (s) based on design of special programs from time to time.</p>

The relevance of suggested functional areas to Sustainable Development Goal (SDG)

Functional Area	SDG Linkage
A. Veterinary Care.	<p><i>Key contribution to SDG:</i></p> <p>Goal -I ‘No poverty.’</p> <p><i>By way of:</i></p> <p>Protecting animal assets of the poor.</p> <p>Goal-3: Good Health and Wellbeing</p> <p>By way of:</p> <p>Preventing the spread of human diseases that originate in Animals</p> <p><i>Connected SDG Target</i></p> <p>1.2: By 2030, reduce at least by half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions.</p> <p>3.3: By 2030, end the epidemics neglected tropical and communicable diseases.</p>
B. Epidemiology, disease control, and Public Health	<p><i>Key contribution to SDG:</i></p> <p>Goal -I ‘No poverty’</p> <p><i>By way of:</i></p> <p>Protecting animal assets of the poor.</p> <p>Goal-3: Good Health and Wellbeing</p> <p>By way of:</p> <p>Preventing the spread of human diseases that originates in Animals.</p> <p>Assisting in human vaccine research.</p> <p>Assisting in bio-terrorism control.</p> <p>Assisting in control of other risks, e.g., Drug resistance and Anti-Microbial Resistance.</p>

Functional Area	SDG Linkage
C. Service standards control, Extension, Skilling and entrepreneurial support	<p>Connected SDG Target</p> <p>1.2: By 2030, reduce at least by half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions.</p> <p>3.3: By 2030, end the epidemics of neglected tropical and communicable diseases.</p> <p>3.b Support for research and development of vaccines for human diseases.</p> <p>3.d Increase capacity for early warning, risk reduction, and management of national and global health risks.</p>
	<p>Key contribution to SDG:</p> <p>Goal -1 ‘No poverty’</p> <p><i>By way of:</i></p> <p>Building a skill to earn a livelihood.</p> <p>Linking people to financial / micro-credit organizations.</p> <p>Goal-2: Zero hunger</p> <p><i>By way of:</i></p> <p>Engaging people to keep livestock as a source of nutritious food.</p> <p>Promoting technologies for smallholders that can improve productivity.</p> <p>Training people to engage in sustainable food production.</p> <p>Promoting practices that can help conserve genetic bio-diversity.</p> <p>Promoting livestock-related research, investment on gene bank.</p> <p>Goal-4 Quality Education</p> <p><i>By way of:</i></p> <p>Increasing number of youths with technical, vocational skills link to livestock farming, animal handling.</p>

Functional Area	SDG Linkage
	<p>Goal-5 Gender Equality.</p> <p><i>By way of:</i></p> <p>Ensuring equal participation and responsibility for men and Women in livestock farming and trade.</p> <p>Goal-13 Climate Action</p> <p><i>By way of:</i></p> <p>Undertaking mitigation measures, e.g. promotion of practices that can reduce methane emission in livestock.</p> <p>Connected SDG Target</p> <p>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.</p> <p>2.1 By 2030, end hunger and ensure access by all people, in particular, the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient (animal-based) food all year round.</p> <p>2.3 By 2030, double the agricultural productivity and income of small-scale food producers, in particular women, indigenous people, family farmers, pastoralists, fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.</p> <p>2.4 By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality</p> <p>2.5 By 2020 maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed</p> <p>2a. increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension</p>

Functional Area	SDG Linkage
D. Livestock/poultry breeding support.	<p>services, technology development, and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular in the least developed countries</p>
	<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>
	<p>5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate</p>
	<p>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning</p>
	<p>Key contribution to SDG:</p> <p>Goal-2: Zero hunger</p> <p>By way of:</p> <p>Improve the productivity of livestock</p> <p>Conservation of genetic resources.</p> <p>Connected SDG Target</p> <p>2.3 By 2030, double the agricultural productivity and income of small-scale food producers, in particular women, indigenous people, family farmers, pastoralists, fishers, including through secure and equal access to land, other productive resources, and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.</p> <p>2.5 By 2020 maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed</p>

Functional Area	SDG Linkage
E. Enterprise, value chain development, risk support and Facilitation of Livestock/poultry product marketing and trade.	<p>Key contribution to SDG:</p> <p>Goal -1 ‘No poverty’</p> <p><i>By way of:</i></p> <p>Building resilience of poor to handle economic shocks (Livestock ownership acting as insurance)</p> <p>Goal-2: Zero hunger</p> <p><i>By way of:</i></p> <p>Increase the availability of livestock products.</p> <p>Ensuring the availability of safe, nutritious food.</p> <p>Preventing the price volatility of livestock food.</p> <p>Goal-3: Good Health and Wellbeing</p> <p><i>By way of:</i></p> <p>Ensuring the availability of safe, nutritious livestock products.</p> <p>Goal-7: Affordable and Clean Energy</p> <p><i>By way of:</i></p> <p>Promotion of biogas</p> <p>Goal -8 Decent work and economic growth</p> <p><i>By way of:</i></p> <p>Providing earning opportunities from livestock rearing and trade of livestock and livestock products.</p> <p>Promotion of livestock-based enterprises.</p> <p>Skill Employment generation</p> <p>Goal-9 Industry, Innovation, and Infrastructure</p> <p><i>By way of:</i></p> <p>Sustainable industrialization of livestock sector</p> <p>Encouraging innovation in production, value addition, and processing</p> <p>Ensuring better price of livestock products, thus the income of farmers.</p>

Functional Area	SDG Linkage
	<p>Goal-12: Sustainable consumption and production</p> <p><i>By way of:</i></p> <p>Promoting the efficient use of natural resources in livestock-based enterprises.</p> <p>Ensuring appropriate waste handling</p> <p>Connected SDG Target</p> <p>1.5 By 2030 build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p> <p>2.1 By 2030, end hunger and ensure access by all people, in particular, the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient (animal-based) food all year round.</p> <p>2c. Adopt measures to ensure the proper functioning of food commodity markets and their derivatives, and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.</p> <p>3.3: By 2030, end the epidemics of neglected tropical and communicable diseases.</p> <p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.</p> <p>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services</p> <p>9.3 Increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets</p> <p>12.2 By 2030 achieve sustainable management and efficient use of natural resources</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</p>