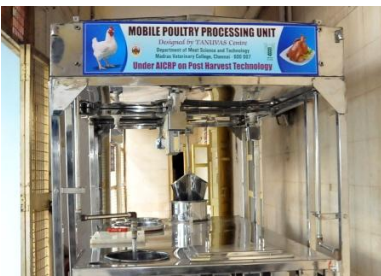



5. LIVESTOCK MACHINERY

i	Name of the Technology	:	Mobile poultry processing unit-cum-retail meat stall
ii	Application/ Use	:	Mobile poultry processing unit-cum-retail meat stall was designed to address the hygiene status of slaughter and dressing of poultry and to serve as an ideal street meat food vending stall in cities where commercial space is highly prohibitive in cost and availability
iii	Description of Technology : Mobile poultry processing unit-cum-retail meat stall has all the necessary features for hygienic slaughter and dressing of poultry such as a poultry crate to hold live birds, a bleeding unit, a novel scalding component, a Teflon coated cutting board, water receptacles with tap, an insulated trough, a wastes collection chute and an improvised power supply system with good artificial lighting. It is made of stainless steel frame structures.		
iv	Input/raw material	:	
	a. Overall dimension (L x B x H mm)	:	7 feet and 11 inches X 4 feet and 5 inches X 6 feet and nine inches (Length X Breadth X Height)
	b. Weight	:	800 kg (Fully stainless steel body) 400 Kg (Aluminum Body with stainless steel at all surfaces that may get in contact with meat)
	c. Prime mover	:	
	d. Power (hp)	:	1Hp , 0.75 Kv motor for scalding; Four 12 KV batteries Inverter – 3 Kva Four bulbs (CFL)
	e. Man power	:	Two.
	f. Land	:	Sufficient to park the vehicle
	g. Investment	:	Rs 5.5 lakhs (Fully stainless steel body) Rs 3.5 lakhs (Aluminum Body with stainless steel at all surfaces that may get in contact with meat)
v	Output capacity	:	35 to 40 birds per hour
vi	Unit cost (per machine)	:	Rs 5.5 lakhs (Fully stainless steel body) Rs 3.5 lakhs (Aluminum Body with stainless steel at all surfaces that may get in contact with meat)
vii	Suitability for crop/ commodity	:	Chicken
viii	Efficiency	:	90 %
ix	Unit cost of operation	:	Rs 3/- bird
x	Patent obtained/applied	:	Yet to apply
xi	Commercialization status	:	Under Process.
	a) No. of Licensees	:	
	b) Addresses of Licensees or Manufacturer	:	
xii	Contact Address	:	Department of Livestock Products Technology (Meat Science) Madras Veterinary College Chennai- 600 007

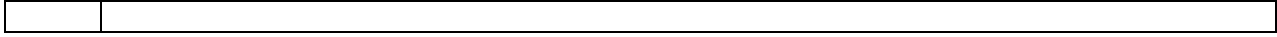
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i.	Name of the Technology	:	Feed Block Making Machine																
ii.	Application/ Use	:	A manually operated feed block making machine was developed for the preparation of feed block. The feed block is useful in increasing utilization efficiency through the increased acceptability by the animals, increasing storability and transportability.																
iii.	Description of Technology :		<p>The processing unit consists of a handle, square threaded screw, sliding wooden block and an angle iron supporting frame. The feed block die is made of 1.5 mm mild steel sheet which has been provided with hinges and latches for quick disassembling operations. The supporting bench has been made using four pieces of mild steel angle iron 35 x 35 x 5 mm and 3 mm thick mild steel plate.</p> 																
iv.	Input/raw material	:	<table border="1"> <thead> <tr> <th>Name of Ingredients</th> <th>Amount, Kg</th> </tr> </thead> <tbody> <tr> <td>Wheat straw</td> <td>1.750</td> </tr> <tr> <td>Groundnut haulms</td> <td>1.750</td> </tr> <tr> <td>Groundnut cake</td> <td>0.700</td> </tr> <tr> <td>Molasses</td> <td>0.150</td> </tr> <tr> <td>Common salt</td> <td>0.500</td> </tr> <tr> <td>Urea</td> <td>0.150</td> </tr> <tr> <td>Total</td> <td>5.000</td> </tr> </tbody> </table>	Name of Ingredients	Amount, Kg	Wheat straw	1.750	Groundnut haulms	1.750	Groundnut cake	0.700	Molasses	0.150	Common salt	0.500	Urea	0.150	Total	5.000
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Urea	0.150																		
Total	5.000																		
	a) Overall dimension	:	525 x 300x1280 mm																
	b) Weight	:	40 kg																
	c) Prime mover/ Plant & Machinery	:	-																
	d) Man power	:	Two persons can produce about 40 blocks in a day																
	e) Power	:	-																
	f) Land	:	-																
	g) Investment	:	Rs. 7000/- Machine cost + Raw materials cost																
v.	Output capacity	:	4 to 5 block per hour																
vi.	Unit cost (per machine)	:	Rs. 7000/- Machine cost																
vii.	Suitability for crops/commodity	:	Feed																
viii.	Efficiency	:	-																
ix.	Unit cost of operation	:	-																
x.	Patent obtained/applied	:	No																
xi.	Commercialization status	:																	
	(a) No. of Licensees to whom the technology has been transferred	:	NGO's and farmers																
	(b) Selected Addresses of Licensee/Manufacturer	:	Nil																
xii	Contact Address		Professor and Research Engineer, AICRP on PHT College of Agricultural Engineering, Junagadh Agricultural University, JUNAGADH - 362 001 (Gujarat)																

i	Name of the Technology	:	Women Friendly Fish Vending and Display Unit
ii	Application/ Use	:	Addresses the issue of post-harvest loss in terms of extending the keeping quality of seafood and fresh water fishes with ice storage and avoid the drudgery of the fisher women in procuring fish on regular basis from various places in bulk.
iii	Description of Technology :		<p>The unit mainly consists of A. Storage box B. Waste collection box C. Lid with Glass D. Box for water E. Box for detergent F. Tray for display, G. Cash box and boxes for storage of utilities. Generally icing of fish adds to cost and transportation expenses. Since this technology has well insulated storage space for fish, it reduces the ice melting rate, thereby reducing the selling cost incurred for ice This technology extends the keeping quality of fish for 4 to 5 days and increases the marginal benefit to fish vendors. Also the technology helps to change the existing practice of unhygienic handling and marketing of fish.</p> 
iv	Input/raw material	:	Food grade stainless steel
	h. dimension (L x B x H mm)	:	<ul style="list-style-type: none"> • storage box (850 X 460 X 440 mm) • waste collection tank (200 X 270 X 440) mm • box for storing water (140 X 200 X 440) mm
v	Output capacity	:	Capacity =175L (upto 100 kg fish apart from ice)
vi	Unit cost (per machine)	:	Rs. 25,000
vii	Suitability for crop/ commodity	:	Fish
viii	Efficiency	:	Good Insulation with a ice melting rate of 10% per day
ix	Unit cost of operation	:	-
x	Patent obtained/applied	:	yes
xi	Commercialization status	:	Ready for commercialization
	a) No. of Licensees	:	-
	b) Addresses of Licensees or Manufacturer	:	-
xii	Contact Address	:	Department of Fish Processing Technology College of Fisheries, KVAFSU Mangalore

i	Name of the Technology	Model retail outlet for the production of hygienic Chicken Meat
ii	Application/Use	A modern chicken outlet has been designed and developed which is helpful in production of clean and hygienic meat that reduces the spread of the meat borne pathogens and disease outbreaks.
iii	<p>Description of Technology:</p> <p>In India, meat production is carried out by organized i.e. commercial processing plants as well as unorganized i.e. retail chicken shops, sectors. Since, Indian consumers generally prefer to purchase poultry meat from a retail market wherein birds are slaughtered in front of them, unfortunately in most of the unorganized retail shops, poultry processing procedures are carried out in the small part; butchers do not wash the carcasses and uses wooden block for making cuts of chicken. Therefore, chances of contaminations are more thus; there is great risk of getting cases of food borne illness/infections. Considering the present unhygienic meat production at unorganized retail shops, there is a need to have better facility for hygienic chicken meat production. Keeping in view, a modern chicken outlet has been designed and developed under the sub-head project entitled as “Establishment and demonstration of model retail outlet for chicken.” which is helpful in production of clean and hygienic meat that reduces the spread of the meat borne pathogens and hence disease outbreaks.</p>	
iv	Input/raw material	
	a. Overall dimension	8X2X3 feet
	b. Weight	150 Kg
	c. Prime mover	Movable
	d. Man Power	2 Person
	e. Land	15X10 feet
	f. Investment	Rs 1,25,000/- only
v	Output capacity	50-100 Chicken processing/day
vi	Unit cost	Rs 1,25,000/- only
vii	Suitability for crop/commodity	Poultry Processing
viii	Efficiency	Highly Efficient
ix	Unit cost of operation	NA
x	Contact Address	Department of Veterinary Public Health and Epidemiology Bombay Veterinary College Parel, Mumbai – 400 012 Maharashtra (INDIA)





i.	a. Type of Technology	:	Equipment
	b. Technology developed	:	Pedal Operated Ice Crusher
ii.	Application/ Use	:	Pedal operated ice crusher is useful to crush the block ice on board and in the fish landing centers and fish retail markets. The crushed ice is effective in preservation and handling of fish in the best possible condition after the catch. This also helps to minimize the post harvest losses and keeps the catch fresh during the transit that fetches good price in the market.
iii.	Description of Technology : Pedal operated ice crusher consists of a crushing cylinder with spikes, casing, feeding chute, outlet slots, discharge chute, flywheel, chain and sprocket power transmission system with pedal and seat arrangement. The speed of crushing cylinder is about 485–500 rpm for an average pedaling speed of 90-95 rpm, which is sufficient to crush the ice blocks. The average capacity of the crusher is around one tonne per hour. Unit cost of production of pedal operated ice crusher is Rs. 16,000/- . The cost of operation is Rs. 1.56/- for crushing one block of ice weighing 50 kg. The technology helps the fishermen to save about 40-60% of ice requirement when it is used on board.		
iv.	Input/raw material	:	
	a) Overall dimensions	:	1500 x 1000 x 1200 mm
	b) Weight	:	120 kg
	c) Prime mover/ Plant & Machinery	:	Pedal
	d) Power	:	Nil
	e) Man power	:	2 labourers
	f) Land	:	9 square meter
	g) Investment	:	Rs. 16,000/-
v.	Output capacity	:	1 tonne/hour
vi.	Unit cost (per machine)	:	Rs. 16,000/-
vii.	Suitability for crops/commodity	:	Ice blocks
viii.	Efficiency	:	95-97 per cent
ix.	Unit cost of operation	:	Rs.1.56 per 50 kg ice block
x.	Patent obtained/applied	:	Not applied
xi.	Commercialization status	:	Ready for commercialization
	(a) No. of Licensees to whom the technology has been transferred	:	One fisherman and one fabricator
	(b) Selected Addresses of Licensee/Manufacturer	:	-
xii.	Contact Address	:	Sr. Scientist, AICRP on Post Harvest Technology Dept. of Processing and Food Engineering, College of Agricultural Engineering, UAS, Raichur.