# Research:

## 1. List of Research Projects: Completed& Ongoing

Sr. No.	Title of the Project	Name of PI/ Major Advisor/ Research Worker	Funding Agency	Total Cost of the project (Rs in Lakh)	Extra-mural (Funding agency)/ Intra-mural	Status (Compl eted/On going)	Duration
1	"Disseminat ion of poultry and goat meat processing technology and establishme nt of meat processing demonstrati on unit for livelihood upliftment of farmers and butcher communities of Marathwada Region, Maharashtra"	(PI) Dr. R. N. Waghamare (Co-PI) Dr. S.V. Londhe Dr. M.G. Nikam	DST, New Delhi	70.99 Lakh	Extra-mural DST, New Delhi	Completed	2019-202

## 2. List of Private Agency Projects:

Sr. No.	Title of the Project	Name of PI/ Major Advisor/ Research Worker	Funding Agency	Total Cost of the project (Rs in Lakh)	Extra-mural (Funding agency)/ Intra-mural	Status (Complet ed/Ongoi ng)	Duration
1	Efficacy Evaluatio n of Ginoguar d -GP1 and Ginoguar d -GP2 as	Dr. V.V. Deshmukh Dr. R. N. Waghamare Dr. M. G. Nikam and Dr. M. V. Dhumal	Godrej Industrie s Ltd (Chemic al), Mumbai	0.67	Godrej Industries Ltd (Chemical), Mumbai	Complete d	2019-20

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Performa			
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Broilers			

#### 3. Research Priorities:

Sr. No.	Research Area	Aim	Objective	Benefits of Farmers
1	Antimicrobial Resistance	Antimicrobial Resistance pattern of selected food borne pathogens in various animal origin food chain	To study phenotypic and genotypic Antimicrobial Resistance pattern of selected food borne pathogens	Control of AMR and Surveillance Data
2	Meat Decontamination techniques	Study physical and chemical carcass decontamination methods	To study effect of various physical and chemical carcass decontamination methods on physical, chemical and microbial qualities of meat	Identify suitable carcass decontamination techniques
3	Zoonoses	Study prevalence of brucellosis	To identify prevalence of brucellosis in small ruminants of Marathwada region	Control of Brucella in small ruminants

#### 4. Thesis:

Master:

	of Department : Departme Health and Epidemiology			
Sr. No.	Name of the Student	Title of Thesis	Year of Completion	Name of the Advisor
1	Manjramkar Aniket Jagdish	Quality Assessment of Commercially Available Cow Urine Distillates	2018	Dr. V.V. Deshmukh
2	Bahirwal Pankaj Shesherao	Hazard Analysis Of Khoa Production Practices In And Around Parbhani	2018	Dr. V.V. Deshmukh
3	Rathod Amol Shivajirao	Evaluation of Synergistic Effect of Hydrogen Peroxide and Ultraviolet Radiation on Microbial Quality of Table Eggs	2019	Dr. R. N. Waghamare
4	Kagane Bajarang Ram	Antibiogram Studies of Escherichia Coli Isolates From Layer Production Systems of Marathwada Region.	2020	Dr. R. N. Waghamare
5	Reddy Rajesh Ramesh	Antibiogram Studies of Salmonella Isolated from Broiler Production System in and Around Parbhani City.	2020	Dr. V.V. Deshmukh
6	Miss More Kajal Dilip	Use of Ultraviolet Light For Decontamination of Raw Chicken Carcasses	2021	Dr. R. N. Waghamare
7	Chilkewar Dinesh Dnyaneshwar	Antimicrobial Resistance Profile of Salmonella spp. Isolated from Meat	2022	Dr. R. N. Waghamare

		Samples of Marathwada		
8	Gadewar Shridhar Shivappa	Comparative Efficacy of Various Decontaminants on Shelf life of chicken at Refrigeration Temperature	2022	Dr. R. N. Waghamare
9	TADAVI KARISHMA (V/16/167)	Effectiveness Of Sodium Hypochlorite, Lactic Acid and Ultraviolet Light Against E. coli and Salmonella spp. Inoculated on Chicken Meat Surfaces	2023	Dr. R. N. Waghamare
10	RASVE RADHA LAXMAN	Antibiogram of Salmonella spp. Isolated From Backyard and Indigenously Developed Poultry Breed Production System	2023	Dr. R. N. Waghamare

Doctoral: NA

	f Department: Departmen Health and Epidemiology	t of Veterinary		
Sr. No.	Name of the Student	Title of Thesis	Year of Completion	Name of the Advisor

### 5. Research Papers Published: List of Research Publications:

Sr N o.	Authors	Ye ar	Title of the Research Paper	Name of the Journal	Volume; Page Nos.	NA AS Rati ng, if any
1	CS Shekh, VV Deshmukh, RN Waghamare, NM Markandeya, MS Vaidya.	20 13	Isolation of pathogenic Escherichi a coli from buffalo meat in Parbhani	Vet. world	2013 277-279	7.60

			Maharasht			
			ra, India			
2	Sukhadeo B	20	Presence	Emerging	2016 5 55	19.2
	Barbuddhe, Swapnil P Doijad, Alexander Goesmann, Rolf Hilker, Krupali V Poharkar,De epak B Rawool, Nitin V Kurkure, Dewanand R Kalorey, Satyaveer S Malik, Ingudam Shakuntala,S andeep Chaudhari, Vikas Waskar, Dilecta D'Cost, Rahul Kolhe, Ritu Arora, Ashish Roy, Abhay Raorane, Satyajit Kale, Ajay Pathak, Mamta Negi, Simranpreet Kaur, Rupesh Waghmare, Shubhangi	20 15	Presence of a widely disseminat ed Listeria monocytog enes serotype 4b clone in India	Emerging Microbes & Infections	2016,5 e55, doi:10.1038/emi.2016.55	19.2
3	Warke, et al V.M. Vaidya,	20	Cystic	Acta	2018 63(2), 231- 243	7.50
	R.J. Zende	18	Echinococ	Parasitologica		
	A.M. Paturkar		cosis in animals			
	Paturkar, M.L. Gatne,		animais			
	D.G. Dighe,		humans of			
	R.N.		Maharasht			
	Waghmare,		ra state,			
	S.L. Moon,		India			

	S.S. Bhave, K.G. Bengale					
4	RN Waghamare, AM Paturkar, VM Vaidya, RJ Zende, ZN Dubal	20 18	Phenotypic and genotypic drug resistance profile of Salmonella serovars isolated from poultry farm and processing units located in and around Mumbai city, India	Veterinary World	2018 11(12): 1682-1688	7.60
5	Vilas Vaidya, Ashish Paturka1, Ravindra Zende, Mukulesh Gatne, Dhananjay Dighe, Rupesh Waghmare, Shilpa Moon, Sujata Bhave, Priyanka Jadhav, Nilam Wavhal	20 18	Scenario of porcine cysticercos is and human taeniasis in Maharasht ra State, India	Turk J Vet Anim Sci	2018 42: 353-358	6.60
6	Nilam Wavhal, Ashish Paturkar, Vilas Vaidya, Rupesh Waghmare, Ravindra Zende And Shilpa Moon	20 19	Seropreval ence of porcine cysticercos is in Maharasht ra	Indian Journal of Animal Sciences	2019 89(4): 365–368	6.40

7	P. Baraily, R. J. Zende, D. P. Kshirsagar, V. M. Vaidya, R. N. Waghamare, A. M. Paturkar, R. P. Todankar and A. H. Shirke	20 19	Rapid Detection of Shiga toxin-Prod ucing E. Coli in Animal Origin Foods Using Loop-Med iated Isothermal Amplificat ion (LAMP) Assay	Agric Res	2019 8(4):490–496	7.40
8	R. N. Waghamare, A. M. Paturkar, V. M. Vaidya, R. J. Zende, Amit Kumar and J. S. Bedi	20 20	Screening of antimicro bial residues and confirmati on of doxycycli ne in samples collected from chicken farms and processing units located around Mumbai, India*	Indian Journal of Animal Research	2020 54 (11): 1415-1421	6.50
9	Waghmare R.N., Zende R.J., Waskar V.S., Paturkar A.M., Kulkarni D.S.	20 12	Prevalence of Listeria Spp. in Milk Sold in Different Markets of Mumbai city	J. Vet .Pub. Hlth	2012 (2)	3.33
10	RJ Zende, DP Kshirsagar, VM Vaidya, RN	20 16	Prevalence and Antibiogra m Studies of Salmonella	Journal of Veterinary Public Health	2016 14 (1), 41-46	3.33

	Waghamare,		from		I	
	AM Paturkar		Foods of			
	7 HVI I ataikai		Animal			
			Origin in			
			Mumbai			
			City.			
11	Deepika P.,	20	Effects of	J. Vet. Pub. Hlth	2017, 15(2)	3.33
	R.J. Zende,	17	Electron			
	D.P.		Beam			
	Kshirsagar,		Irradiation			
	V.S. Lande,		on Safety			
	V.M. Vaidya,		and			
	R.N.		Qualities			
	Waghamare,		of Pork			
	A.H. Shirke		Salami			
	and R.P.		Stored at			
	Todankar,		Refrigerati on			
			Temperatu			
			re			
12	R.G.	20	Applicatio	Journal of	2018 16 (1), 39-43	3.33
1.2	Shende*,	18	n of Flow	Veterinary Public	2010 10 (1), 35 13	3.55
	V.M. Vaidya,		Through	Health		
	R.J. Zende,		Assay for			
	A.M.		Serdignosi			
	Paturkar,		s of			
	R.N.		Cysticerco			
	Waghmare,		si in Pigs			
	L.N. Kale,					
	S.S. Bhave, N.B. Aswar					
	and R.S.					
	Khillare					
13	RJ Zende,	20	Loop-Med	International	2017	4.31
	DP	17	iated	Journal of		
	Kshirsagar,		Isothermal	Livestock	7(5), 23-35	
	VM Vaidya,		Amplificat	Research		
	RN		ion Assay			
	Waghamare,		(LAMP):			
	RP Todankar		A Rapid			
			Tool for			
			Diagnosis			
			of Food			
			Borne and			
			Zoonotic			
			Pathogens:			
14	PS Bahirwal,	20	A Review Microbial	Int. J. Pure App.	2018	4.55
14	VV	17	Hazard	Biosci	2010	4.33
	Deshmukh,	1 /	Analysis	210001	6 (6), 525-534	
	RN		of Milk		(-7)	
	Waghamare		and Khoa			
	andMS		in Manual			
1	Vaidya		and			

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			Production			
			Processes			
			in			
			Parbhani			
			City of			
			Maharasht			
			ra State of			
15	C D loghi	20	India Microbial	Int I Dura Ann	2018	4.55
13	S. D Joshi, VV	18	Hazard	Int. J. Pure App. Biosci		4.33
	Deshmulh,	10	Analysis	Diosci	6 (4), 613-624	
	RN		of Branded			
	Waghmare,		and Retail			
	PV Yeotikar		Milk Sold			
			in			
			Parbhani			
			City of			
			Maharasht			
			ra State,			
			India			
16	PS Bahirwal,	20	Physicoch	Int. J. Pure App.	2018	4.55
	VV	18	emical	Biosci	((() 511 517	
	Deshmukh,		Hazard		6 (6), 511-517	
	RN Waahamara		Analysis of Milk			
	Waghamare and MS		and Khoa			
	Vaidya		in Manual			
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			Maharasht			
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1.5	D : 11 C C	20	India		2010	4
17	Patil S. S.,	20	Detection	Int. J. Pure App.	2018	4.55
	Deshmukh	18	of	Biosci	6 (2): 155 159	
	V.V., Waahmara		Salmonella		6 (2): 455-458	
	Waghmare R. N. and		spp. Isolated			
	Yeotikar P.V.		from			
	100tikui 1. v.		Poultry			
			Meat and			
			Sources of			
			Contamina			
			tion in			
			Retail			
			Poultry			
			Meat			

			Shops by			
			Using PCR			
18	Kale, L., Waghamare, R., Vaidya, V., Zende, R., Paturkar, A., Barua, A., & Shende, R. (2018).	20 18	Studies on Occurrenc e of Trichinella spp. in Pork Meat Sold in Goa and Assam States of India.	Journal of Livestock Research	2018 8(11), 201-207. doi: 10.5455/ijlr.2017100707033	4.31
19	Patil S. S., Deshmukh V. V.*, Waghmare R. N. and Yeotikar P. V	20 19	Microbial Hazard Analysis of Retail Poultry Meat Sold in Unorganiz ed Slaughter Units in Parbhani City of Marathwa da Region of Maharasht ra State	Int. J. Pure App. Biosci	. 7 (2): 434-439 (2019)	4.55
20	A. S. Rathod, R. N. Waghamare, V. V. Deshmukh and M. S. Vaidya	20 20	Sanitizatio n of Table Eggs with Treatment of Hydrogen Peroxide and Ultraviolet Radiation*	International Journal of Livestock Research	2020, 10 (3), 99-107	4.31
21	Bajrang Kagane, Rupesh Waghamare, Vivek Deshmukh, Sanjay Londhe, Kakasaheb Khose and Pandit Nandedkar	20 21	Antimicro bial Resistance of Pathogenic Escherichi a coli isolated from Broiler Production Systems*	Journal of Animal Research	(2021): v.11 (5), p. 915-923.	4.78

22	R.N. Waghamare, H.K. Popalghat, S.V. Londhe, V.V. Deshmukh and V.V. Khobe	20 21	An online survey of consumers of Maharasht ra concerning the expected change in the meat and meat product business.*	Journal of Animal Research	2021 11(1): 137-141.	4.78
23	R. N. Waghamare, S. V. Londhe, S. S. Ajabe, V. V. Khobe, and V.V. Deshmukh	20 22	Marketing Skills and Sanitary Status of Retail Meat Shops In relation to Butchers' Educationa I Backgroun d in Maharasht ra*	Indian Journal of Extension Education	2022 Vol. 58, No. 2 (129-134)	4.48
24	Rupali Pathade, Sanjaykumar Londhe*, Sandip Rindhe, Anita Chappalwar, Rupesh Waghmare and Dipali Patil	20 22	Effect of Spinach (Spinacia oleracea) and Moringa (Moringa olerifia) Powder on Physcio-ch emical and Sensory Attributes of Chicken Meat Balls*	Chem Sci Rev Lett	2022, 11 (42), 269-275	4.87
25	Rajesh Ramesh Reddy, Vivek Vasant Deshmukh and Rupesh Nagesh Waghamare	20 21	Antimicro bial Resistance Pattern of Salmonella spp. Isolates of Broiler	Ind. J. Pure App. Biosci.	(2021) 9(5), 6-12	4.55

			Production			
			System*			
26	A. S.	20	Shelf	International	11(3), 65-71.	4.31
20	Nemade, S.	21	Stability of	Journal of	http://dx.doi.org/10.5455/ijlr.2	1.51
	V. Londhe1		Cookies	Livestock	0190830084712	
	and R. N.		Incorporat	Research,		
	Waghamare		ed with	,		
	9		Spent Hen			
			Meat			
			Powder in			
			Aerobic			
			Packaging			
			at Ambient			
			Temperatu			
			re (37±1 0C)*			
27	Kajal D.	20	Use of	Journal of	44(11): 226-239, 2022;	5.14
21	More a,	22	Ultraviolet	Experimental	Article no.JEAI.92848	3.14
	Rupesh N.		Light for	Agriculture	1 11010 110.01/11.72070	
	Waghamare		Surface	International		
	aφ*, Vivek		Decontami			
	V.		nation of			
	Deshmukh		Raw			
	a#,		Chicken			
	Sanjay V.		Carcasses			
	Londhe bo					
	and Kakasaheb					
	K. Khose					
28	Santosh	20	Effect of	Chemical Science	2023, 12 (47), 193-197	4.87
	Virkar,	23	Freeze-Th	Review and	2023, 12 (17), 133 137	1.07
	Sanjaykumar		aw Cycle	Letters		
	Londhe*,		on			
	Dipali Patil,		Microbiolo			
	Rupesh		gical			
	Waghmare		Quality of			
	and Sandeep		Chicken			
20	Rindhe Shanda B	20	Meat	LafDambar	2016 22(2) 12 14	
29	Shende R. G., V.M.	16	Incidence of	J. of Bombay Veterinary College	2016 23(2) 12-14	
	Vaidya, R.J.	10	Cysticerosi	vetermary conege		
	Zende, A.M.		s in Pigs			
	Paturkar, ,		slaughtere			
	R.N.		d in			
	Waghmare,		Deonar			
	SKale L. N.		Abattoir			
	and, S.S.					
20	Bhave	20	G( 1'	1 1 1 0	2017 ( (5) (20 (41	
30	RN Waghamara	20	Studies on	Int. J. Curr.	2017 6 (5), 630-641	
	<b>Waghamare</b> , AM	17	Occurrenc e of	Microbiol. App. Sci.		
	, Alvi Paturkar, RJ		Invasive	DCI.		
	Zende, VM		Salmonella			
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	Vaidya, RS Gandage		Unorganis ed Poultry Farm to Retail Chicken Meat Shops in Mumbai City, India			
31	VR Masoji, RJ Zende, RD Suryawanshi , VM Vaidya, RN Waghamare	20 17	Rapid Detection of Salmonella spp. in Animal Origin Foods by In-House Developed Loop-Med iated Isothermal Amplificat ion (LAMP) Assay	Int. J. Curr. Microbiol. App. Sci	2017 6 (4), 2523-2532	
32	Deepika P., R.J. Zende, D.P. Kshirsagar, V.S. Lande, V.M. Vaidya, <b>R.N.</b> <b>Waghamare</b> , R.P. Todankar and A.H. Shirke	20 17	Effects of Electron Beam Irradiation on Microbial Quality of Pork Sausage Stored at Refrigerati on Temperatu re	Intern. J. of Current Microbiol	2017 6 (11): 3978-3987	
33	L.N. Kale, R.N. Waghamare *, V.M. Vaidya, R.J. Zende, A.M. Paturkar, R.G.Shende, N.B. Aswar and D.P. Kshirsagar	20 18	Studies on Occurrenc e of Trichinello sis in Pigs and Its Molecular Characteri zation Using Multiplex PCR in Maharasht ra, India	Int.J.Curr.Microbi ol.App.Sci	2018 7(8): 4451-4457	

34	VB Shelke, MP Sakhare, MFMF Siddiqui, RN Waghamare, ND Jadhav, and AS Tawheed	20 19	Prevalence of subclinical mastitis in dairy cows in and around Parbhani*	The Pharma Innovation Journal	2019 8(10): 78-81
35	R. N. Waghamare , A. M. Paturkar, V. M. Vaidya, R. J. Zende	20 19	Quantifyin g the Salmonella spp. at critical stages of poultry processing by miniature MPN techniques (mMPN)	Journal of Entomology and Zoology Studies	2019 7(2): 1089-1093
36	A.J. Manjramkar, V.V. Deshmukh, R.N. Waghamare and M.S. Vaidya	20 19	Assessmen t of Antimicro bial Properties of Cow Urine Distillates	Int.J.Curr.Microbi ol.App.Sci	2019 8(8): 2556-2565
37	DM More, SV Londhe, DP Patil, GR Gnagane, RN Waghmare and KK Khose	20 19	Assessmen t of Shelf life of wheat flour based quail meat enriched noodle during room temperatur e	Journal of Entomology and Zoology Studies	2019; 7(1): 1576-1580
38	Rupesh Waghamare , Ashish Paturkar, Vilas Vaidya, Ravindra Zende, Milind Chavak and	20 20	Risk of Salmonella in Various Poultry Farming and Processing Operations Around	Int.J.Curr.Microbi ol.App.Sci	2020 9(8): 1024-1034

	Santosh		Mumbai,			
	Moregaonka		India*			
	r					
39	Prabhawati	20	Assessmen	Current Journal of	Volume 42, Issue 29, Page	
	N. Bhumre,	23	t of Shelf	Applied Science	30-37, 2023; Article	
	Sanjaykumar		Life of	and Technology	no.CJAST.103479	
	V. Londhe,		Chicken			
	Dipali P.		Eggs			
	Patil a,		Enriched			
	Sandeep N.		Wheat			
	Rindhe		Flour			
	and Rupesh		Based			
	N.		Noodles			
	Waghmare					

### Research Recommendations

Sr. No.	1
Year	2020
Project Title	Evaluation of Synergistic Effect of Hydrogen Peroxide and Ultraviolet
	Radiation on Microbial Quality of Table Eggs
Investigators	A S. Rathod, R. N. Waghamare and V. V. Deshmukh
Recommendations	Combination of hydrogen peroxide spray (1.5%) and 4 minute exposure to
	UV radiation (250nm) is recommended for reducing upto 90% microbial
	load of table egg sold in retail market

Sr. No.	2
Year	2022
Project Title	Dissemination of poultry and goat meat processing technology and establishment of meat processing demonstration unit for livelihood upliftment of farmers and butcher communities of Marathwada Region, Maharashtra
Investigators	R. N. Waghamare, S. V. Londhe and V. V. Deshmukh
Recommendations	To elevate the sanitary status of retail meat shop, it is recommended to initiate a skill development program on hygienic meat production

Sr. No.	3
Year	2019
Project Title	Risk assessment of Salmonella spp in chicken production chain
Investigators	Dr. R. N. Waghamare , Dr. A M. Paturkar, Dr. R. J. Zende and Dr. V. M. Vaidya

Recommendations	It is recommended that the litter at farm level, and defeathering and
	evisceration in chicken meat production chain are considered to be high risk
	stages for the occurrence of Salmonella spp

- 8. Research Priorities / Thematic areas: Department Wise :
  - 1. Antimicrobial Resistance
  - 2. Food Safety