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What Can Economic Analysis Contribute?

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Abstract

Animal health policy in South Asia region has been characterized predominantly by direct action by the government either in providing services to livestock farmers or in undertaking livestock productivity enhancing measures. It is a widely held view among policy makers that given the poverty status of livestock farmers, the potential of livestock in contributing to poverty reduction, and poverty reduction being a public good, there is strong rationale for direct action by the government as opposed to regulatory, monitoring and market enhancing role. Accordingly, most governments in South Asia have developed large networks of publicly supported service providers backed by free or heavily subsidized input supply.

A series of studies undertaken to assess the distributional outcomes of the above policy have however raised questions about the desirability of such a policy and the need to fine tune service delivery systems including creating space for other non-government service providers. These studies make a reasonably strong case for reducing the subsidies in the form of free services and putting this money into services such as disease prevention, reporting, control, awareness education and so on, for these are the services that are currently neglected due to fiscal pressures and are likely to generate a larger social good than simple treatment services.

The question then is that if policy choices are so clear, why animal health policy in the region continues to encourage 'pervasive direct action by the government' in livestock service delivery instead of a more facilitating role. To address that question the paper shares the experience of one such attempt to understand and influence animal health policy in one of the southern states of India. Based on that experience, the paper argues that policies are an outcome of a process of complex interactions between economic logic, formal and informal power structures, legacies of trust and mistrust, and communication narratives. While significant investment is often made in clarifying the economic logic of alternative policy prescriptions and outcomes, very little thought and investment goes into managing and broad-basing policy processes. The process leading to 'wider buy-in' can often be far more important and needs equal, if not more, attention than economic analysis. This requires greater emphasis on socio-political studies of 'policy processes' and a long term strategy of investment in 'relationship building'.

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Animal Health Policy in South Asia: What Can Economic Analysis Contribute?

Animal health policy in South Asia region has been characterized predominantly by direct action by the government either in providing services to livestock farmers or in undertaking livestock productivity enhancing measures. It is a widely held view among policy makers that given the poverty status of South Asian livestock farmers, the potential of livestock in contributing to poverty reduction, and poverty reduction being a public good, there is strong rationale for direct action by the government as opposed to regulatory, monitoring and market enhancing role [Ahuja (ed), 2004]; Ahuja, Morrenhof and Sen. 2003. Ahuja, Umali-Deininger and de Haan. 2003. Ahuja, McConnell, Umali-Deininger and de Haan. 2004. Accordingly, most government in South Asia have developed large networks of publicly supported service providers backed by free or heavily subsidized input supply.

Any casual observer of livestock farmers in South Asia would perhaps sympathize and support the above policy stance. Given the role of public policy in creation and fair distribution of the economic pie, above policy would make eminent sense on the grounds of fairness and social justice. A more careful analysis of the distributional outcomes of the above policy however raises questions about the desirability of such a policy and the need to fine tune service delivery systems including creating space for other non-government service providers. A series of studies in four states of India, representing different economic, social, market and production contexts, analyzed distributional outcomes of this policy (Ahuja. This paper summarizes the results of those studies to demonstrate, from users' perspective, the need for change in this policy. It then shares the experience of one attempt to understand and influence animal health policy in one of the southern states of India and concludes with some observations on the complexity of policy making processes and the need for investment in managing and broad-basing policy processes.

The context:

The studies were conducted in four states of India representing a wide range of livestock production, marketing and socio cultural contexts as shown below.

1. Gujarat—front runner in dairy cooperative movement, relatively commercialized production system, experience with different systems of service delivery including cost recovery by cooperative service providers. Located on the west coast.
2. Rajasthan—although located adjacent to Gujarat, the state represents arid production zone with annual rainfall approximately 800mm and vast geographical area under desert conditions.
3. Kerala—a small state in South India with long history of crossbreeding and highest proportion of crossbreds in livestock population. A state known for its achievements in male and female literacy and high outmigration. Highest density of veterinary institutions (dispensaries, hospitals and polyclinics)
4. Orissa—a mid size state on the eastern coast. Highest rural and urban poverty incidence among all states of India, highly subsistence production system, high tribal population, and poor social and physical infrastructure.

Further comparative statistics across these states are given in Table 1.

Household surveys of livestock farmers were conducted to understand the differential access by various categories of service users and the potential impacts of alternative policy choices. The first of the two surveys covered service provider units operated by various agencies—government, cooperative unions, private entrepreneurs and NGOs. The second survey covered livestock owning households and collected information on livestock assets and services, household characteristics, and agriculture activities of selected households. The basic questions that the surveys sought to address were

1. Who are the primary service providers? What kind of services are available from which providers?
2. What is the level of access to these services for the beneficiaries?
3. How is the use pattern for these services different for different groups of farmers?
4. At what price are these services available? Do the poor receive services at a different price?
5. How do various service providers fare with respect to price and non-price factors? How do the users perceive the price and quality of these services?

The findings based on the household surveys have already been published in Ahuja, Umali-Deininger and de Haan (2003) and Ahuja, Morrenhof and Sen (2003). Here we summarize the key findings borrowing heavily from these two papers.

Table 1: Comparative profile of the study states

Indicator	Gujarat	Rajasthan	Kerala	Orissa	All India
Geographical area ('000 Km^2)	196.0	342.2	38.9	155.7	3287.3
Poverty incidence (%)					
Rural	22.18	26.46	25.76	49.72	37.27
Urban	27.89	30.49	24.55	41.64	32.36
Literacy (%)					
Male	81	68	95	67	73
Female	87	33	89	45	51
Number of livestock (millions)	21.2	49.1	3.6	23.4	464.5
Proportion of crossbreds in total cattle (%)	8.66	4.28	81.01	7.65	12.34
Proportion of buffaloes among total livestock animals (percent)	33.1	21.2	1.8	6.0	20.1
Average milk yield (kg/animal in milkday)					
Buffaloes	4.2	4.4	6.2	2.5	4.3
Crossbred cows	8.2	6.1	7.0	4.9	6.4
Indigenous cows	3.3	2.9	2.6	0.8	1.9
Average rainfall (mm)	1004.2	817.8	2911.3	1337.6	47647
Number of veterinary institutions[2]					
Veterinary hospitals/polyclinics	14	1437	260	13	8720
Veterinary Dispensaries	478	285	833	527	17820
Veterinary First Aid Centres	589	1727	26	2939	25433

[2] Veterinary polyclinics are the veterinary hospitals with multiple specialities and specialists such as surgery, gynaecology, radiology, etc. These employ several postgraduate veterinarians and are located mostly in state headquarters and at times in some important district headquarters. Veterinary hospitals are institutions with inpatient facilities and with usually one or two qualified veterinarians. These are located mostly in district headquarters. Veterinary dispensaries are the same as hospitals but without inpatient facilities and with only one qualified veterinarian. First aid centres are minor dispensaries in villages manned by paraprofessionals.

Primary Providers and access to services

In all the study states, the veterinarians employed by the State Animal Husbandry Departments (SAHDs) are the primary service providers. They provide services through the network of veterinary dispensaries, veterinary hospitals and polyclinics and First Aid Veterinary Centres. Except in the case of emergencies, all government services are supposed to be delivered at the centres. In the case of emergencies, the government veterinarians are allowed to make home visits and charge a nominal fee to cover the transportation cost. After office hours, however, the veterinary doctors were allowed to engage in private practice. But, in reality, private practice by government veterinarians was widespread even during office hours.

Alternative sources of livestock services include cooperative unions, private veterinarians and some NGOs. Among the four states included in this study, cooperatives offer a significant alternative only in some districts of Gujarat. The cooperative service is mostly delivered at home. Extent of private veterinary practices on farm animals is extremely limited and they generally operate in areas where other service providers—government, cooperative, NGOs, etc—are not able to meet the demand.

In Gujarat, Kerala and Orissa, there is fairly good access to these services with more than 95 percent sample respondents in these states stating they would be able to obtain government veterinary services when needed. In Rajasthan, the comparable figure was 63 percent. The proportion of those having access to cooperative veterinary services was 47 percent in Gujarat and about 14–17 percent in Rajasthan and Kerala.

An important question in this context pertains to differential access to these services by poor and non-poor. More specifically, do the poor households have similar access to these services as the rich? Table 2 compares the proportion of those in the bottom, middle and top 20 percent households, as ranked by a wealth index based on ownership of household assets, who responded ‘yes’ to the access question. It is clear that in Gujarat and Kerala, all households had good access, while in Rajasthan the poor felt more constrained with respect to receiving veterinary services. For example, in Rajasthan approximately 64 percent of the households in the bottom group reported having access to government veterinary services at

the centre against 94 percent in the top group. Comparable figures for home service were 58 percent and 93 percent.

Table 2: Access disaggregated by wealth categories

(Percent)

Do you have access to	Bottom 20%	Middle 20%	Top 20%
		Gujarat	
Ethnic/traditional healer	71	58.0	52.4
Private veterinarian	6	11.1	7.3
Cooperative veterinarian	52	55.5	40.2
Government veterinarian			
At the centre	90.5	91.4	93.9
At home	90.5	93.9	93.5
		Rajasthan	
Ethnic/traditional healer	75.6	86.1	91.5
Private veterinarian	2.7	12.5	26.8
Cooperative veterinarian	2.7	11.1	23.9
Government veterinarian			
At the centre	63.5	62.5	93.9
At home	58.1	56.9	92.7
		Kerala	
Ethnic/traditional healer	8.2	4.8	2.4
Private veterinarian	22.4	19.0	26.5
Cooperative veterinarian	12.9	17.9	19.3
Government veterinarian			
At the centre	100	99.0	100
At home	100	98.8	99.0

Use pattern

Analysis of data on the number of veterinary visits made by different providers indicated that a larger number of these cases were attended at home. It was quite common for the government veterinarians to attend even ordinary sickness cases at farmers' homes and the majority of such visits were undertaken in a private capacity. In fact, farmers in all income groups revealed a clear preference towards home service and the government veterinarians catered to that preference mainly in a private capacity. Analysis also indicated that, on a per adult bovine basis, the number of visits in Rajasthan and Kerala increased with income whereas this trend was less sharp in Gujarat. Further, in Gujarat, there was no significant difference in the proportion of home versus in-centre services across income groups. Both these trends were, at least partly, explained by the availability of relatively inexpensive

home service from the cooperative unions. In all the three states, the proportion of those opting for the services of private veterinarians increased with income. This was specially evident in Rajasthan and Kerala where private usage of the top 20 percent was more than double the rate of lowest 20 percent. At least part of this tendency could be explained by the fact that private veterinarians established themselves in relatively higher income areas.

Price Structure

Generally all three types of providers—government, private, and co-operative—were providing the full range of curative veterinary services, that is, general sickness, gynaecological problems, injuries and minor surgeries. Farmers were required to go to veterinary hospitals and polyclinics only in the case of major surgery. Such cases were, however, few in number and farmers generally did not seek major surgeries.

For in-centre service, the prescribed prices were either zero or very nominal (in the range of Rs.2 to Rs.5 per visit, including medicines, depending on the type of animal). In reality, however, the service users incurred expenditures that were significantly higher than officially prescribed price. As per the data collected in the survey, average visit price for in-centre service was about Rs.40.00 in Rajasthan, Rs.18.00 in Kerala, and Rs. 5.00 in Orissa. Total cost, including the cost of drugs and medicines purchased from the market, turned out to be approximately Rs. 125.00 in Rajasthan, Rs.50.00 in Kerala, and Rs. 70.00 in Orissa[3].

The story for home service is similar. Even though the government veterinarians were allowed to charge a nominal amount for home visit to cover transportation cost, in reality the charges were significantly higher than what could be justified as the transportation cost. Estimated average cost of a home visit (including the cost of medicines purchased at the stores) by a government veterinarian was Rs.178.00 in Kerala, Rs.160.00 in Gujarat and Orissa, and over Rs.300.00 in Rajasthan (Table 3). As a share of total cases (in-centre and home), only about 15 percent were treated for free in Rajasthan, 25 percent in Kerala, and about 45 percent in Orissa.

[3] USD-INR exchange rate at the time of Gujarat, Rajsthan and Kerala surveys was approx Rs.43/USD. At the time of Orissa survey the exchange rate had moved to Rs.48/USD.

With respect to prices, there are two more questions that need closer examination. One, were the majority of those receiving services at official prices poor?, and two, were the prices paid by the poor significantly lower, if not zero, than those paid by the rich?

With respect to the first question, analysis indicated that of those receiving service for free, only about 10 percent in Rajasthan and about 30 percent in Kerala belonged to the bottom quintile. Coming to the second question—whether the average price paid increased with economic status—it appears that average expenditure per animal per veterinary visit was indeed lower in the case of poor households. At the same time, however, to be able to conclude that the poor received services at the discounted price, one will need to control for variation in the service quality. This question is further explored below.

Table 3: Total charges per home visit

(Rs.)

Disease	Gujarat			Rajasthan		Kerala		Orissa
	Govt	Coop	Private	Govt	Private	Govt	Private	
General sickness	153	49	173	275	214	175	140	..
Gynaecological problems	248	59	284	306	316	180	..	233
FMD	..	..	..	292	..	134	..	71
Mastitis	..	..	..	..	..	235	..	190
Injury	117	..	..	..	..	150	..	121
Pneumonia	..	..	..	258	..	..	..	..
HS	..	..	..	302	..	..	..	204
Other	146	50	157	314	..	120	..	..
Overall average	161	51.5	202.	333	286	178	204	..

Note: ".." indicates not calculated due to insufficient observations.

User perceptions

That the users paid significantly more than what was officially prescribed is established beyond doubt from the data presented. An equally important question is however is how did the users perceive the prices and service quality? To get a sense of use perceptions, the survey asked the users if they considered the the quality to be ‘satisfactory’ and the cost to be ‘reasonable’.

In general, there was widespread satisfaction with the service quality. In Gujarat over 80 percent of the cases attended by cooperative veterinarians received a ‘satisfactory’ quality

as well as a 'reasonable' cost rating from the users. Comparable figures for private and government veterinarians were 76 and 68 percent. Kerala and Orissa did even better on the quality rating and there were no appreciable differences across private and government veterinarians. A large number of users in Gujarat, Kerala and Orissa considered the price of the services to be reasonable. In Rajasthan on the other hand, however, a significantly larger proportion of respondents considered the price to be unreasonably high. Given that average charges per visit in Rajasthan were substantially higher than in other states, this result makes intuitive sense.

Finally, a comparison of perceptions across income groups reveals an interesting pattern. In both Gujarat and Rajasthan, the proportion of those who responded that quality is satisfactory and cost is reasonable increased with the income, but the association was much less pronounced in the case of quality than in the cost.

Price and demand structure

The descriptive analysis in the preceding sections provides a reasonably good idea of the structure of market in terms of overall availability, prices, and use perceptions. Still however the analysis is not sufficient to evaluate the potential distributional impact of any change in service delivery policy, specially with respect to subsidies. That question requires an understanding of the factors influencing the demand for these services, especially the magnitude of price elasticities (net of other factors influencing demand) and how these vary with income. We therefore now turn to analyzing (*i*) the price differences across government, private veterinarians and cooperative unions, and (*ii*) price elasticities of demand for veterinary services for different income groups.

Price differences across provider types

Regression results with price as dependent variable are presented in Table 4. Looking first at the coefficients on the variables GOV and COOP, it is clear that except in Gujarat, there was no significant difference in the fee charged by government and private veterinarians. In Gujarat, although the users paid prices that were higher than prescribed, these were still lower than the prices charged by private providers. Controlling for service quality as well as location specific characteristics, the average difference between private and government

doctor appeared to be in the range of Rs.60.00–70.00. Service from cooperative unions in Gujarat was still cheaper[4].

Table 4: Explaining the variation in price per visit[5]

Explanatory variables	Gujarat	Rajasthan	Kerala	Orissa
Intercept	82.38	-65.89	14.83	-
	(2.81)	(-1.10)	(1.24)	
Service time	0.68	0.34	1.00	-
	(2.72)	(1.32)	(5.34)	
Travel and waiting time	-0.03	0.03	-0.20	-
	(-0.70)	(0.72)	(-4.50)	
SUPMED (1 if supplied medicines during the visit,	-1.29	70.20*	13.70	-70.5
0 otherwise)	(-0.12)	(2.40)	(3.18)	(-4.4)
VETVIS (number of visits to cure)	-9.86	79.00*	-5.73	-
	(-1.17)	(3.20)	(-2.09)	
GOV (1 if government veterinarian, 0 otherwise)	-44.85	42.80	-4.31	-
	(-4.07)	(1.23)	(-0.42)	
COOP (1 if cooperative veterinarian, 0 otherwise)	-103.3	-92.50	—	-
	(-8.17)	(-1.00)		
SICK1 (1 if gynaecological or surgical case, 0	33.64	92.80$	-14.60	61.2
otherwise)	(2.97)	(1.76)	(-1.35)	(1.4)
SICK2 (1 if pneumonia, FMD or HS case, 0	-32.46	12.00	-14.90	2.4
otherwise)	(-0.92)	(0.27)	(-3.08)	(0.1)
Diarrhoea	--	--	--	-74.3
				(-5.0)
Mastitis	--	--	--	86.8
				(2.1)
SOLVED (1 if the problem was solved in that	-0.48	-61.00*	8.83	-
visit, 0 otherwise)	(-0.05)	(-2.07)	(2.01)	
HOME (1 if home service, 0 otherwise)	67.62	172.60*	65.80	77.8
	(2.78)	(5.40)	(13.90)	(6.6)
Asset Index				-19.3
				(-2.2)
POOR (1 if household belongs to bottom 40	0.58	-101.90	17.20	-
percent, 0 otherwise)	(0.05)	(-1.23)	(0.68)	
GOV*POOR	-27.81	68.30	-15.05	-
	(-1.62)	(0.78)	(-0.56)	
Adjusted R-squared	0.27	0.18	0.44	0.60
N (sample size)	356	340	612	297

Note: Figures in parentheses are t- Statistics. * Significant at 1 percent level $ Significant at 5 percent level; @ Significant at 10 percent level

Source: Ahuja, Umali-Deininger and de Haan (2003) and Ahuja, Morrenhof and Sen (2003)

[4] The sample size for private veterinarians in both Kerala and Rajasthan was too small to allow meaningful testing of the differences. Thus, the finding of no significant difference in these two states is not very robust.

[5] The design of Orissa survey was slightly different than other three states and hence not all variables are similarly defined.

Interaction term between GOV and POOR help us answer the question-- did the poor receive government services at a relatively lower price? In all the three states, the coefficient on the interaction term is statistically insignificant. This implies that there is no targeting of relatively cheaper services towards the poor in any of the three states. It appears that the prevailing price in poorer areas was somewhat lower than that prevailing in richer areas. But, within the given area, both poor and rich paid the same price.

Demand for Veterinary Services

Regression results for demand for veterinary services are presented in Table 5. Primary variables of our concern in the Table are the price of veterinary care, the wealth index and the interaction between price and wealth. The coefficient on price is negative and statistically significant in all the three states. This is consistent with economic theory and implies that a higher price does depress overall demand. Neither of the other two variables—wealth index and the interaction between wealth and price—is statistically significant. This implies that income is not a major determinant of service utilization. The sign on this parameter is positive in Rajasthan and Kerala, which is consistent with *a-priori* expectations. In Gujarat, however, the analysis shows a negative wealth effect. One possible explanation for this result could be that the incidence of sickness in Gujarat may be lower for richer households compared to the poorer ones due to better diet and care, whereas such a relationship was not very strong in other two states. Estimates of price elasticity of demand are presented in Table 6. Although the slope of demand function does not vary with income, we still calculated the elasticities for different income groups by valuing them at the mean price and visits for the respective income groups.

To recapitulate, the analysis presented above establishes beyond a reasonable doubt that (i) subsidized or free services are not reaching the farmers as intended, (ii) farmers are actually not looking for free or subsidized services as they consider the prices they are currently paying as ‘reasonable’, (iii) the prices charged by government and private veterinarians are not significantly different, and (iv) the structure of ‘economic demand’ for these services is not very different across poor and non-poor. This would make a reasonably strong case for reducing/withdrawing these subsidies and putting this money into services such as disease prevention, reporting, control, awareness education and so on, for these are the services that are currently neglected due to fiscal pressures and are likely to generate a larger social good

than simple treatment services. Disease prevention and control is also likely to result in reduced private cost of treatment by way of bringing down the incidence of those diseases that have serious livelihood implications for the poor. A number of models are now available around the world to organize effective and efficient service delivery in a wide variety of production, market and socio-economic contexts.

Table 5: Demand functions for veterinary services

Explanatory Variable	Department Variable: Number of veterinary visits during the reference period of the survey			
	Gujarat	Rajasthan	Kerala	Orissa
Intercept	0.938	-0.145	1.00	-2.60
	(1.04)*	(-0.157)	(0.65)	(1.08)
Milk price	0.002	0.005	0.262	0.247
	(0.003)	(0.05)	(1.92)	(2.35)
Price of veterinary service	-0.010	-0.003	-0.013	0.0008
	(-2.12)	(-1.59)	(-2.53)	(0.40)
Wealth index	-0.362	0.417	0.204	0.304
	(-1.40)	(1.49)	(0.76)	(1.32)
Veterinary service price* wealth index	0.035	-0.002	-0.002	-0.003
	(1.23)	(-0.89)	(-0.56)	(-1.50)
Average education in the household	0.040	0.042	0.030	0.092
	(0.79)	(0.81)	(0.56)	(2.87)
Sickness dummy (1 if no animal sick during the reference period, 0 otherwise)	-8.770	-7.340	-11.680	-
	(-0.33)	(-0.24)	(-0.26)	
Service time (minutes)	0.080	0.007	-0.051	-
	(2.65)	(3.06)	(-2.62)	
Travel and waiting time (minutes)	-0.003	-0.002	-0.002	-
	(-0.76)	(-1.10)	(-0.28)	
Number of buffaloes owned by the household	-0.020	0.047	-1.27	-
	(-0.25)	(1.79)	(-1.82)	
Number of cows owned by the household	0.100	0.028	0.668	-
	(1.10)	(1.25)	(4.76)	
Number of desi cows owned by the household	-	-	-	0.016
				(0.065)
Number of crossbred cows owned by the household	-	-	-	0.265
				(0.146)#
Number of bullocks owned by the household	-	-	-	0.096
				(0.049)*
Number of small ruminants owned by the household				0.063
				(0.012)$
Sample size	367	297	387	160
Log likelihood	-289.71	-296.11	-567.80	-189.0

* Figures in parentheses are Z values.

Table 6: Price elasticity of demand for veterinary services

State	Elasticity (percent)
Gujarat	-0.016
Rajasthan	-0.040
Kerala	-0.140
Orissa	0.000

Obvious question then is that if policy choices are so clear, why animal health policy in the region continues to encourage 'pervasive direct action by the government' in livestock service delivery rather than the government focusing more on delivery of public good services and playing a regulatory and market enhancing role supported by targeted direct action. Obvious answer of course is that 'good economics' is only one of the many inputs in the choice of policy options. Indeed, policy has been described as a 'chaos of purpose and accidents' and not necessarily a matter of the rational implementation of the choices supported by economic analysis. It is therefore of critical importance to understand the processes that govern the choice of policy options and identify leverage points that can be used to influence choice of policy options in favor of intended beneficiaries, specially the poor. These processes depend heavily on socio-politico-economic context and therefore vary greatly within and between countries.

In what follows, we briefly describe one attempt to understand and influence animal health policy in one of the southern states—Andhra Pradesh, in India[6]. Even though this is not one of the four states presented above, the state does have close similarity to above states in many respects and therefore serves to illustrate the inherent complexity of policy making processes.

Assessment and reflections on livestock services delivery in AP

As in other states of India, in Andhra Pradesh as well the Government continues to be largest provider of livestock services to farmers. Services are provided largely from stationary veterinary centres. As usual, the government system of Livestock Service Delivery is

[6] See Ahuja, Joseph, Gustafson and Otte. 2006; Ahuja, Kurup, Bhasin and Joseph. 2006. Sastry, and Ramalinga Raju. 2004. Sastry, Ramalinga Raju. 2005. Venkatramaiah Ahuja. 2005, for further details.

generally slow to catch up with changes in production systems or the resultant service needs. The stakeholders generally have little influence on such changes, and economic sustainability of service delivery by governments is not on high focus as the service delivery system is sustained mostly through budgetary support. Similarly, public good services like prevention, control and eradication of diseases, disease surveillance, quality enforcement of drugs, vaccines and biologicals, etc do not receive their due priority. The systems under public-private partnership, NGOs and Community Based Organisations (CBOs), on the other hand, aim at economic viability, wider reach and door delivery of services over time.

To assess the efficiency and effectiveness of livestock service delivery systems and to suggest appropriate reform measures, the Pro-Poor Livestock Policy Initiative of Food and Agriculture Organization in partnership with 'Capitalization of Livestock Program Experiences India' project of SDC/IC and Animal Husbandry department of Government of Andhra Pradesh, initiated a multi-tier consultative process to identify service needs of farmers and gaps in service delivery systems and to develop a widely owned reform action plan. The initiative functioned under the overall guidance and supervision of a multi-stakeholder Steering Committee chaired by the top bureaucrat from Animal Husbandry Department. Through detailed consultations and studies, the initiative, identified the service needs of the small livestock holders and the gaps and deficiencies in service delivery. The new input led the stakeholders to demand further widening of the scope and coverage of the initiative. The resultant refinements included wider area and stakeholder coverage under the consultative process, additional studies to identify the gaps and weaknesses of the Para-veterinary system and putting in place a legal frame for delivery of minor veterinary services. It also led to the development of an efficient and practical prevention and control strategy and an action plan for six animal diseases of economic importance to the poor.

The participatory process in which the state Department of AH and the major stakeholder categories played an active role, improved the acceptability and implementability of the proposed reforms. Evolving a common agenda amidst opposing views, striking a balance among strong divergent demands of stakeholder groups and maintaining strict neutrality of the consultative process were the major challenges.

The process followed in the AP could perhaps be described as 'Inquiry Process'. This involved talking to a wide range of stakeholders to ascertain their (often differing) views on effective livestock service delivery systems, discussing it with technical experts and peoples' representatives, and conducting field studies to take an informed view on a policy intervention.

The process began with organization of consultative workshops at the village and district levels involving farmers, people's organizations, government departments, financial institutions, and local civil society and community based organizations. The workshops at the district level were preceded by team consultations in selected villages representing a range of livestock delivery systems and poverty contexts. First two workshops were held in Mahboobnagar—the district with high density of small ruminants, and Chittoor—a drought prone district with high proportion of crossbreds. Both these workshops were organized by SMILDA (State Management Institute for Livestock Development) and district level Animal Husbandry Departments with support from Hyderabad. The CEO of Andhra Pradesh Livestock Development Agency (APLDA) and Additional Director (Animal Husbandry Department) facilitated the deliberations in these workshops.

Subsequent to these two workshops and village consultations, some allegations were made that the consultative process was narrow and an attempt to lend legitimacy to a pre-conceived agenda of privatization. Doubts were also expressed on the sincerity and ability of government officials to lead a complex consultative process with objectivity. The project team responded to this criticism by further widening the consultative process and inviting some NGOs to lead the consultative process. Organization of the next farmer workshop was therefore shared by a local NGO and the government.

The picture of conflicting interactions between politics, history, culture and ideologies that emerged from this process turned out to be far more complex than what was anticipated by the project team. Evolving a common agenda against opposing views, striking a balance among strong divergent demands of stakeholder groups and maintaining strict neutrality of the consultative process turned out to be major challenges the project had to deal with. Indeed, the lessons that came out were highly sensitive and the process often painful as most of them had to do with relationships between people. Several times during the consultative process, emotional temperatures were raised high specially if there was a

perceived threat to someone's interest. That posed the danger that this will lead to shutting down the communication rather than stimulating it.

Despite a complex political and social history of elites dominating the power structure, however, the project team could stay on course without compromising the core values of openness, transparency and inclusive participation. One of the reasons for the same appears to be the prior stock of 'social capital' created by few collaborating partners. Due to the history of prior partnerships between Animal Husbandry Department and other collaborators, AHD already had significant exposure to participatory processes and the AHD staff did not feel threatened by openly discussing their strengths and weaknesses. Due to the same reasons, it was also possible to identify selected individuals within and outside the government who would commit themselves to the core values of participation and change.

As stakeholder consultations progressed, and the gaps and deficiencies in service delivery were identified, the new information enabled the stakeholders to demand a further widening of the scope and coverage of the initiative. The resultant refinements included wider area and stakeholder coverage under the consultative process, additional studies to identify the gaps and weaknesses of the Para-veterinary system and putting in place a legal frame for delivery of minor veterinary services. It also led to the development of an efficient and practical prevention and control strategy and an action plan for six animal diseases of economic importance to the poor. The participatory process in which the state Department of AH and the major stakeholder categories played an active role, improved the acceptability and implementability of the proposed reforms.

The key lesson that emerged was that policies are an outcome of a process of complex interactions between economic logic, formal and informal power structures, legacies of trust and mistrust, and communication narratives. While significant investment is often made in clarifying the economic logic of alternative policy prescriptions and outcomes, very little thought and investment goes into managing and broad-basing policy processes. As illustrated above the process leading to 'wider buy-in' can often be far more important and needs equal, if not more, attention than economic analysis. This requires greater emphasis on socio-political studies of 'policy processes' and a long term strategy of investment in 'relationship building'.

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