Community-based animal health workers and institutional change: the DELIVERI Project in Indonesia

by COKRO S. LEKSMONO and JOHN YOUNG

Introduction
This paper describes a pilot project introducing community-based animal health worker (CAHW) services in Indonesia, focusing on the implementation process, institutional change and impact. It also describes how the CAHWs has changed the perception of all stakeholders about the provision of services in rural areas. The pilot project was one component of a five-year UK Department for International Development (DFID) funded project called The Decentralised Livestock Services in Eastern Indonesia (DELIVERI).

Background
The DELIVERI project’s aim was to help the Government of Indonesia to reform livestock services. The project’s specific purpose was to make livestock-related institutions more responsive to the need of small-scale farmers, including the resource-poor, through the adoption and replication of more client-orientated and participatory approaches.

To do this, the project developed and tested new models of livestock service provision in four districts in North and South Sulawesi. The project also included human resource development, institutional development and information activities at district, provincial, and national level to ensure that the lessons learnt were institutionalised within District Livestock Services (DLS), Provincial Livestock Services (PLS), and the Directorate General for Livestock Production (DGLP), so that any successful models could be replicated throughout Indonesia.

When the project started in 1996, towards the end of the Suharto era, government services were highly centralised, bureaucratic and inefficient, although policies promoting decentralisation, privatisation and participation had been in place for a number of years. All budgets, services, programmes, and projects continued to be designed and controlled from the capital, Jakarta, and regional and district staff simply followed orders. During the first two years,
although farmers and field-level staff were enthusiastic about the project's new approaches at field level, and a few enlightened senior managers recognised their value, the project had little impact on policy or processes within the bureaucracy. Then the economic, social and political crisis in 1997/8 pushed Suharto out of office and the new era of Reformasi forced ill prepared government departments to implement rapidly the long-shelved policies of decentralisation, privatisation, and participation. By that time, the project had a number of successful pilot projects up and running, and some charismatic champions among livestock service staff at all levels, and suddenly found itself in high demand.

The CAHW pilot projects proved particularly popular with government staff and farmers, and over the last two years of the project a total of 161 CAHWs were trained and established in six locations throughout the country. Five provinces in the island of Sumatera have been trying to replicate the CAHWs model in 12 districts.

**Approach**

The pilot project begun with a Participatory Rural Appraisal (PRA) exercise in each project location during which animal disease and poor accessibility to veterinary services was identified as one of the most important problems. Further discussions with communities and other stakeholders identified the CAHW approach as the best method to overcome the problem.

Each community nominated a representative to be trained as a CAHW by the project, and afterwards they returned to their community to provide basic clinical animal health services for a fee. They were also given a soft loan to buy basic veterinary tools and drugs and were given an annually renewable certificate by the local District Livestock Services (DLS) allowing them to provide services. Monthly meetings were held to provide some continuing education, and to exchange experiences and information between the CAHWs and the DLS. In the year 2000, the CAHWs set up an association to represent their interests.

**Institutional impact**

A greater role for communities

The implementation of CAHWs in the pilot project areas completely changed the delivery of basic clinical animal health services (Table 1). Local communities who used to rely on the free but intermittent and poor quality government service, welcomed the opportunity to take control of the service themselves. They were actively involved in the planning, implementation, and evaluation of the service and were willing to pay for the service provided to them by members of their own community. The CAHWs were also highly motivated to provide a high quality service to their clients, and there was a significant increase in customer satisfaction with animal health services and an ever-increasing trend in the number of cases treated by each CAHW per month.

A decreasing hands-on role for government

The government role in the provision of basic clinical animal health services decreased dramatically and they gradually delegated increasing authority to the CAHWs, while contin-
could do with the government service. 

Demands on the CAHW – something that they never felt they were paying for the service, felt they had a right to make improve the quality of their service, from clients who, since implementation, accountability & reaching poor farmers

Planning done by the government with almost no consultation with the livestock owners. Policies tended to be implemented uniformly across the country with no consideration of locally specific needs, conditions or aspirations.

DLS responsible for the delivery of livestock services. Service provided free of charge (including private goods like basic clinical animal health service). Local staff accountable to the head of districts.

Some consensus that DLS projects were targeted to poorer livestock farmers but usually ended up servicing richer farmers.

The service was planned from the perspective of the bureaucracy. It was supply-driven and often below the expectations of the main beneficiary of the service – the livestock owners.

Key actors and decision-making

Head of local DLS made all major decisions, the rest (including livestock owners) had little influence on key issues.

Decision-making followed central policy or made local decisions with little client consultation and then took a passive approach to ‘marketing’ and service delivery. No public pressures were able to shape these decisions i.e. no popular participation in decision-making and no DLS accountability to customers.

Table 1

<table>
<thead>
<tr>
<th>Before the introduction of CAHWs</th>
<th>After the introduction of CAHWs</th>
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<tr>
<td>Planning, implementation, accountability &amp; reaching poor farmers</td>
<td>Planning of CAHWs done with the community. CAHWs are representative of the community and all animal disease prevention and treatment is done through or involving the CAHW.</td>
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<tr>
<td>DLS responsible for the delivery of livestock services. Service provided free of charge (including private goods like basic clinical animal health service). Local staff accountable to the head of districts.</td>
<td>CAHWs responsible for delivering basic clinical animal health services. Government already sub-contracted them to do some public-good service (e.g. mass vaccination). Competition introduced to encourage them to give their best service.</td>
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<tr>
<td>Some consensus that DLS projects were targeted to poorer livestock farmers but usually ended up servicing richer farmers.</td>
<td>Service accessible to all community members, regardless of wealth. CAHW provides animal health service with correct qualification, cost and quality to the rural communities which are relatively poor compared to urban areas.</td>
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<tr>
<td>The service was planned from the perspective of the bureaucracy. It was supply-driven and often below the expectations of the main beneficiary of the service – the livestock owners.</td>
<td>The service was demand-driven and planned from the perspective of the clients. Because they pay for the service, it gives them the right to complain if the service is below standard.</td>
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<tr>
<td>Head of local DLS made all major decisions, the rest (including livestock owners) had little influence on key issues.</td>
<td>As the communities are becoming more self-reliant and the CAHWs are more confident in doing their job, they gradually are assuming the decision-making activities regarding their livestock. The head of DLS is still a key actor in maintaining the standard of service.</td>
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<tr>
<td>Decision-making followed central policy or made local decisions with little client consultation and then took a passive approach to ‘marketing’ and service delivery. No public pressures were able to shape these decisions i.e. no popular participation in decision-making and no DLS accountability to customers.</td>
<td>The whole CAHW issue has encouraged more strategic thinking by the decision makers and DLS staff about how to satisfy livestock animal health demands; encouraging a wider, longer term vision of needs and planned action to meet them. Planning and thinking ahead is more realistic.</td>
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The transition proved difficult for some DLS staff who felt threatened by their new role, or lacked the initiative and creativity to develop it. Gradually however, even some public-good services including mass vaccination, were sub-contracted to the CAHWs.

The change provided a powerful impetus for more strategic thinking by livestock service managers and decision makers at various levels in the bureaucracy to seek new ways of providing better services to local communities and to make the community more self-reliant. As they became more familiar with the principles of client-focused services, they began to try to apply them to other services. There has been a dramatic improvement in communication and exchange of information between livestock service staff and their clients.

The CAHWs also found themselves under pressure to improve the quality of their service, from clients who, since they were paying for the service, felt they had a right to make demands on the CAHW – something that they never felt they could do with the government service.

Economic impact

Accessibility to basic veterinary services has increased substantially. Livestock owners living in rural and marginal areas who used to have a limited access to basic veterinary services can now access basic services any time. This has led to a significant increase in cattle population. Following the economic crisis in Indonesia, the Indonesian Rupiah (IDR) lost over 70% of its value in less than one year, and people, looking for alternative ways to save their money, were encouraged to invest in livestock since they felt that the availability of improved services through the CAHWs reduced the risk of loss from disease.

Most of the CAHWs have been able to make a profit out of their job within three to four months providing a big incentive for them to stay in the job, and ensuring the sustainability of the service.

Efficiency in treating animal disease improved substantially. In 1998 the cost to the government of treating one case was between IDR 111,000 to 212,000. In 2000, the CAHWs were providing the same service for only IDR 5,000 to 35,000. The implementation of CAHWs significantly reduced government spending. A calculation of net benefit-cost in 2000 showed a net present value of IDR. 88.96 million (discount rate 15%), proving that the cost to the Department of Livestock Services of establishing CAHWs is cheaper than...
continuing to provide the service themselves.

The DELIVERI CAHWs also contributed to poverty alleviation. The DELIVERI socio-economic impact report showed a significant redistribution of income from 1997 to 2000 in the district of Barru and Bulukumba (South Sulawesi). While the proportion of respondents in the ‘medium’ wealth ranking category in each district remained constant in 1997 and 2000, both saw an increase in the proportion of respondents falling into the ‘rich’ category, as well as a reduction in the proportion falling into the ‘poor’ category.

Conclusions
The DELIVERI CAHW project shows that:

• privatisation of basic clinical animal health services is consistent with the goals of the service and can substantially improve accessibility, quality, and cost of the service;

• involvement of local communities in planning and implementation of animal health service can increase the self-reliance and decision-making capacity of individual livestock owner; and,

• CAHWs have a comparative advantage to other animal health service providers in terms of transaction cost, qualification and remuneration. They are suitable for the rural poor.

The critical factors for a successful implementation of the CAHW approach are:

• enthusiasm and active involvement of local communities is vital to the sustainability of the service;

• participatory processes that were built in with the DELIVERI project approach have been able to attract genuine interest and involvement of various parties in the programme;

• a favourable policy context that enables local communities’ enthusiasm to flourish and provides continuous support whenever needed; and,

• close linkages with decision makers and managers create common understanding and experience-sharing with all parties involved in the implementation of the pilot project and enable the replication of the CAHW approach elsewhere in Indonesia.

### Table 2: Selected quality of service and economic indicators for DELIVERI

<table>
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<tr>
<th>Before the introduction of CAHWs</th>
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<td><strong>Accessibility to animal health services</strong></td>
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<td>One animal health post in Minahasa district, North Sulawesi served 32 sub-districts and 502 villages.</td>
<td>53 CAHWs trained in Minahasa in 1997.</td>
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<tr>
<td>One animal health post in Barru district, South Sulawesi served five sub-districts and 71 villages.</td>
<td>17 CAHWs trained in Barru in 1998.</td>
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<td>Livestock owners travelled relatively long distances to make a request and &gt; 40% of request require &gt; than three days for a response; 15% of requests never received a response.</td>
<td>Average time to make a report is 17 minutes; 75% of responses within 30 minutes, 21% takes between 30 to 60 minutes, and 4% takes more than 1 hour.</td>
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<td><strong>Quality of animal health services</strong></td>
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<td>Each government animal health service provider treated 12, 24 and 21 cases in 1998, 1999 and 2000, respectively, per month.</td>
<td>Each CAHW treats 115, 183 and 104 cases in 1998, 1999 and 2000, respectively, per month.</td>
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<td>Only 16% of clients rated animal health service as good or very good.</td>
<td>78% of clients rate animal health services as good or very good.</td>
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<tr>
<td><strong>Cost of animal health services</strong></td>
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<td>The cost of treating per animal disease case by the DLS was from Indonesian Rupiah (IDR) 111,000 to 212,000.</td>
<td>The cost of treating per animal disease case by the CAHW is from IDR 5,000 to 35,000 (Leksmono, 2002).</td>
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<td>Total DLS budget for the provision of animal health service was around IDR 65.75 million for each DLS.</td>
<td>The cost of establishing CAHW services is IDR 8.26 million in each district.</td>
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**NOTES**

Cokro S. Leksmono was the livestock adviser on the DELIVERI Project. He has just completed a PhD on community-based animal health workers at the University of Reading, UK and now works as a Research Officer at the Overseas Development Institute in London.

John Young worked on community-based animal health care projects in Kenya for ten years before moving to Indonesia to manage the DELIVERI project. He is now a Research Fellow at the Overseas Development Institute in London, UK.

Information presented in this article is drawn from a number of papers and articles produced by DELIVERI, including work by Alwyn Chilver, Barbara Kirby, Agus Natsukarya, Michelle Phillips, and Dil Peeling. More detailed information is available at www.deliveri.org