

Animal Health

**best practices from FARM-Africa's
Pastoralist Development Project in Kenya**

Booklets in this series

Animal health
Camel husbandry and production
Microenterprise development
The mobile outreach approach
Natural resource management

Much of the material for this series of booklets came out of a workshop held in Nanyuki, Kenya, 2002. It was attended by the following people, who had been part of the Pastoralist Development Project: Dima Bonaya, Chris Field, Brian Heath, Peter Ihuthia, Felix Kipchirchir, Prame Lesorogol, Robert Masibho, Dominic Mbuvi, Mary Miningwo, Ali Hassan Mohammed, Emmanuella Ole Sambu, Piers Simpkin, Chachu Tadicha, D'enge Tullu, John Waita, Isaac Wamugi.

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About FARM-Africa

FARM-Africa (Food and Agricultural Research Management) is a British-based non-governmental organization initiated in 1985 whose goal is to reduce poverty by enabling marginal African farmers and herders to make sustainable improvements to their well-being by managing their renewable natural resources more effectively. The Camel Improvement Project, which later became the Pastoralist Development Project (PDP), was its first undertaking. The project began in Kenya in 1988 and ran for 12 years. This booklet is one of a series documenting how the project progressed and the lessons it learned along the way. It presents the best practices that evolved from the work. FARM-Africa hopes that by recounting the good practices that came out of the project, by listing its points to consider of practices that worked and those that did not, it can be of aid to others who are planning to work with pastoralists in northern Kenya or in a similar environment.

The original PDP strategy

The Camel Improvement Project set out to promote the camel—its husbandry and production—because the camel was seen as being drought tolerant and environmentally friendly, well suited for conditions in northern Kenya. The camel had been neglected or at least underused, and the thought was that with a relatively small input a development project with the camel as its focus could render great benefits. Helping the communities improve this one resource could also act as an entry point for tackling broader development issues.

The project, built on 12 years of research by the UNESCO Integrated Project in Arid Lands (IPAL) in the 1970s and 1980s, was conceived at a time when nomadic pastoralism was considered an archaic form of life by many development agencies and administrators and the camel was considered an unimportant livestock species. Nomads had been encouraged to give up their lifestyle and settle near towns and centres so they would have access to basic services such as health and education. But these policies and uncontrolled water development had led to considerable degradation around settlements and exacerbated the effects of drought. Through education and creation of awareness, the project influenced change of those attitudes and it is now widely accepted that nomadic pastoralism is the most

effective and efficient form of land use in arid pastoral areas. The challenge was, and still is, to provide sustainable services to a society that is constantly on the move.

The next step for the project was to decide how to reach the remote nomadic pastoralists and put in place sustainable means of broadening their management and development capability. FARM-Africa approached this through mobile outreach—taking the project to the nomads rather than establishing sedentary headquarters.

The project's start-up phase involved community dialogue and planning. Local community members agreed with project staff that the project would set up a mobile outreach camp. Staff then gathered information through household questionnaires, range transects and aerial surveys to determine the present situation and later, to record project impact. Initially the project provided its services directly to the selected contact farmers and at the same time it encouraged communities to form camel improvement groups. Gradually the project's scope broadened to undertake work in other major aspects of pastoralist life—natural resource management, microenterprise development, human health care. (See FARM-Africa booklets 'Camel husbandry and production', 'Natural resource management', 'Microenterprise development' and 'The mobile outreach approach'.)

The area

The project area extended from Samburu to Marsabit and Moyale Districts, which are part of the arid and semi-arid lands (ASALs). These lands comprise approximately 80% of Kenya's land area and about 75% of its livestock.¹ Soils are characteristically low in fertility, shallow and highly erodible, often coupled with areas of high salinity. Climatic conditions for the districts vary between lowlands and highlands. Rainfall, generally below 200 to 300 mm per year, is usually erratic in season, duration and distribution. Productivity is dependent on rainfall and varies greatly between areas and seasons. The inherent production systems adopt strategies aimed at mutual coexistence between humans and the livestock they depend on, often as their sole means of livelihood.

The project worked with different ethnic groups—the Ariaal, Samburu and Turkana communities in Samburu District and the Gabra, Rendille, Borana, Somali and Sakuye communities in Marsabit and Moyale Districts.

The Gabra, Rendille, Sakuye and Somali are primarily camel keepers; the Borana and Samburu are traditional cattle owners who have increasingly adopted the camel in recent years.

The general problem and how to approach it

It has long been recognized that development interventions in the ASAL regions have often been inappropriate or unsustainable. Because pastoralist areas and issues had been marginalized, the project first needed to identify key priorities. Originally the project, with a fairly strong emphasis on research, had the following objectives:

- to demonstrate the true economic importance of the camel and improve its productivity in milk, meat and transport
- to improve long-term economic security of pastoral communities and their capacity to survive in harsh arid areas
- to bring together the Kenyan pastoral tribes to encourage a unified development strategy and to link this to the Kenyan scientific community and government policy
- to contribute to a more appropriate model of development among pastoral people, centring on camel productivity improvement and education tailored to survival in arid lands

Renamed the Pastoralist Development Project at the end of phase 1 (April 1992), the new name reflected that the project had now integrated education, range management and health components.

Principles

Establish networks

- Plan only after exhaustive discussion with all other organizations and agencies working in the area. Religious organizations have been long in some of these areas and have a wealth of knowledge, even if their philosophies, ideals and outcomes may be very different from those of a development organization.

Ensure sustainability

- Avoid creating dependency. Look for possible consequences of any intervention before implementing it.

- Make sure that communities buy into a project and pay for the services they receive. Alternative methods for dealing with emergencies or the poorest of the poor should be found, for example, vouchers for drugs.
- Build the capability of local personnel to deliver services rather than rely on direct project implementation.
- Help set action plans and review progress regularly with those who set the action plans—at all levels including the grassroots.
- Share training costs. This may slow down the implementation rate of the training, but it ensures better quality training because those attending demand good service.
- Remember that follow-up and refresher courses are as important as the initial training.
- Identify a realistic exit strategy right at the project planning stage.

As pastoral development takes a long time, long-term strategies and commitments are needed.

Use participatory methods

- Plan interventions with ministry officials and with the pastoralist groups themselves. Where possible use community-based planning, monitoring and evaluation.
- Build on the knowledge and experience of the local people.
- Include communities in quarterly project reporting and planning meetings.
- Set out a clear strategy for all project components and adopt a logical framework approach.
- Draw up a seasonal activity calendar with the community and the agencies involved and plan activities in accordance with that calendar.

Ensure equity

- Take into account differences in gender roles, wealth distribution, age sets, ethnicity, religion and cultural values.

Animal health

The problem

Since pastoralism is the way of life for virtually all the peoples inhabiting the arid and semi-arid lands (ASALs) of northern Kenya, livestock diseases are, naturally, one of their major concerns. Treating all these diseases adequately is beyond the present capability of the Kenyan government. The region is vast; pastoralists move around with their herds frequently and range widely, while the government veterinary services are centralized and sedentary. As a result, fake vets or 'quacks' move in to fill the gap, and misuse of veterinary drugs is common. The project therefore aimed to provide veterinary drugs and services in a way that pastoralists throughout these ASALs would find easily accessible, especially pastoralists farthest from the few towns in the area. The thinking was that if this aim could be realized, disease burdens would lessen and livestock production in these pastoralist households would increase.

The approach

At first, the project provided drugs and services to the communities at cost price, but occasionally they were provided free to demonstrate and promote their use. The project at first carried out limited research on livestock diseases but its priority was on extension service delivery.² The few project workers, however—a number that varied, but about 10 technical and 7 support staff—could not be everywhere at once, so camel improvement groups were formed and a few members in each group trained to handle veterinary drugs.

Lessons learned

- Providing free or cost-price drugs created dependency, undermined initiative and self-help, and was not sustainable.
- As women did not own camels, they were not included in the camel improvement groups and this automatically excluded training women to handle the drugs.
- In practice, the drugs served only the camel improvement groups. The communities at large lacked a sense of ownership of the activity. Women, too, needed to be trained in animal health care and drug handling, as

they were responsible for the goats, sheep and young camels and the larger animals herded close to the homestead.

Originally, drug handling was intended to be voluntary work, but it quickly became apparent that there was no incentive for the individual if all the benefits went to the camel improvement groups and their communities and none went to the handlers themselves. It became clear that to succeed, the system would have to provide incentives for these animal health workers who were handling and dispensing drugs. Drug handlers began setting themselves up in business on their own outside the project. Thus the project realized that to ensure quality and sustainability, it must redesign the approach and train more community-based animal health workers (CAHWs).



The new approach involved the following features:

- It worked with stakeholders to develop selection criteria for those to be trained as CAHWs and had community members help select the trainees.
- It trained and equipped more than 200 CAHWs with drug kits on a cost-sharing basis. The trainees received their drug kits immediately after their training.



- It provided a few animal health assistants (AHAs) with loans to set up their own drug stores to supply the CAHWs with the drugs they needed.
- It linked the CAHWs with commercial drug suppliers who could provide them with a reliable supply of quality drugs and give them advice in how to use them. It also linked the CAHWs with the district veterinary officer and government veterinarians, who could monitor and supervise them and guide them in policy matters.
- It set up monitoring and evaluation systems that equipped the community with appropriate skills to effectively implement its projects and make the necessary adjustments. The project also developed its own system for monitoring CAHW activities.
- It held meetings about twice a year over a 2-year period, in which CAHWs came together to share experiences and lobby for particular interests.
- It mobilized CAHWs to take on outreach services, which both broadened their coverage and improved their competence with the wider experience.

Successful practices

Good practices were developed in a number of different areas, particularly the following six:

- training
- cost sharing
- support and supervision
- links with other organizations
- veterinary drug supply
- sustainability

Training

Training of the community-based animal health workers was conducted in four phases of one week each, held at 3-month intervals. The intervals gave the trainees the opportunity to practise their newly acquired skills. As the course progressed, the trainees gained confidence in their ability and understanding of good animal health practices. Courses were tailored to best meet the trainees' needs, giving particular attention to the most pressing disease problems prevalent in the locality.

A community-based animal health worker

Amuro Abudo, who was a traditional medicine practitioner in Balesa, Marsabit District, was among the first batch of the community-based animal health workers trained in 1994–95. He kept the CIG drug store, diagnosed and treated common livestock diseases and taught animal health care practices but did not find these services profitable. But when PDP began providing drug kits on a cost-sharing basis in 1997, he raised the money and acquired his drug kit in May 1997. He provided animal health services to his community and to remotely located pastoralists. On average, he could attend to about 150 animals and fetch approximately KES 5000 per month.

He quickly saw his economic status improve as proceeds from drug sales and services brought him ready cash for meeting his family's needs—unlike his traditional medicine treatments, which were paid for only in kind, keeping him very poor.

Spending about KES 7500 on drugs and acaricides a year, Amuro has diligently applied his new skills in animal health to his own herd and flock. Livestock production has improved and the mortality rate of his kids and calves has been reduced. For instance he observed a 40% reduction in the death of weak kids and lambs. His herd size has grown from 6 to 10 camels in 3 years and the milk yield increased from 1 to 2 litres per day per camel. He serves well as a role model in demonstrating improved livestock management techniques.

Mary Miningwo, PDP animal health facilitator, Samburu

Training was based on a course manual developed by all those involved in the training—FARM-Africa staff, staff of GTZ and other NGOs, government veterinarians, and CAHWs, who identified which diseases were prevalent. Government veterinary personnel conducted the course in collaboration with a development agency—often FARM-Africa but especially later, with other NGOs. Its content included

- general livestock management and nutrition
- livestock husbandry and general health care
- disease diagnosis and treatment
- drug dosage levels and routes of administration

Training was carried out in the local language.

At the end of each phase in the training, trainees drew up their own action plans, and at the next session, they reported on how they had fulfilled them. This reporting became part of the training in that session. At the end of the fourth phase, participants received a drug kit worth KES 15,000 to 25,000 and a certificate signed by the district veterinary officer and the development agency involved. The trainees, supported by their community, contributed 25% of the value of the kit.

The Lodungokwe drug store

After the community had been sensitized, three community-based animal health workers were trained as part of the Schools Camel Programme. After they completed the four phases of their training, two trainees, a man and a woman, decided to put their drug kits together. Later, monitoring of the performance of their drug store showed that over a period of 4 months they had made gross monthly sales worth about KES 7000. At the time of monitoring, their drug stock was worth KES 33,315 shillings. Over the 4 months, they travelled to Maralal 7 times to purchase drugs worth a total of KES 26,700.

Prame Lesorogol, PDP animal health facilitator, Samburu

Selecting the participants

First the development agency would hold a community meeting to discuss what the community wanted and explain what it could expect to get by training CAHWs—simple treatment of livestock, advice on good husbandry practices, report of disease outbreaks, a way to make referrals.

They discussed what qualities the CAHW should have.³ Selection criteria included qualities such as

- having an interest in animal health, including traditional healers, with herbalists having a particular advantage
- being hard working and committed
- having and keeping livestock

Then—and not necessarily at the meeting or with the development agency present—the community would select the trainees. During the life of PDP, participants were selected from 16 communities. (In addition to the CAHWs, about 2500 people participated in some sort of training in animal health, human health, natural resources management, and education in literacy.)

Community-based animal health worker Anna Lesampe

Anna Lesampe lives in Sererit of Baragoi Division, Samburu District. She was her husband's second wife and had three children. When the camp came to Baragoi Division, the community approved that she be trained with others as a community-based animal health worker (CAHW). But the elders cautioned the FARM-Africa personnel to ensure proper protection of their wife. After 9 months of training she acquired a drug kit, contributing 25% of its cost. Unfortunately, her husband died during this period, and she was left with the responsibility of bringing up her children as well as entering into a new and demanding profession of providing animal health care.

In the Sererit region, each CAHW is assigned a specific area. Being the only female CAHW, Anna was assigned to serve the manyatta [encampment] and pastoralists nearby. Male CAHWs provided services farther away. Although illiterate, she kept good records with the help of a primary school teacher.

- *Anna has made a change in the community's attitude about animal health service. Although once they had thought it was a male activity, now all community members, male and female, seek out her services.*
- *Anna gained recognition from community members as she was seen as a well-off person who had ready cash to attend to her and her family's needs, with enough to buy foodstuffs and pay for school fees.*
- *She attends to about 20 cases per month, for which she has chalked up a 95% recovery rate, and she has reduced the number of deaths in her own livestock by using the skills she has acquired to manage them.*

Mary Miningwo, PDP animal health facilitator, Samburu

Cost sharing

The CAHWs shared in the cost of the kits. They contributed one-fourth either in cash or in the form of milk and meat towards the cost of the kit they received at the end of their training.

Points to consider

This cost sharing has merit for several reasons:

- By making the CAHWs aware of the monetary value of the kits, it instilled in them a sense of responsibility and ownership—‘for free’ is often not valued.
- The community also became aware that drugs and services cost money, and community members must be willing to pay for them.
- As their monetary value was appreciated, the drugs were handled more responsibly and not wasted. As a result, the drug supply lasts longer.
- Ultimately, cost sharing stretches resources further and extends the area in which CAHWs can work.

BUT . . . it does, however, have its drawbacks.

- It may exclude the poor from participating.
- It may conflict with traditional loaning systems.
- It may cause conflict with other development agencies whose policy is to offer everything without cost to those who receive their aid.
- A community may take long to accept the idea.
- It may confuse the CAHWs, who are warned not to give credit or to subsidize drugs, but the project itself is subsidizing the initial start-up kit of drugs.

Support and supervision

Because CAHWs, having only minimal training, are at the grassroots and the bottom in the hierarchical order of animal health providers, they need public recognition and backing from the animal health professionals. This gives them credibility and makes them more acceptable within their communities. A good practice is for the government veterinary department to provide the technical and legal framework within which the CAHWs function—giving them advice, encouraging them, keeping them up to date with information, monitoring their activities.



Follow-up is the key to continuity. Simply training the CAHWs is not enough. PDP was strong in its follow-up activities.

- Its field visits to CAHWs ensured that they provided quality service and quality drugs.
- It ensured there was refresher training.
- It facilitated government involvement in training and monitoring and saw to it that the government veterinary department and others involved in animal health in the area recognized and accepted CAHW work.
- Occasionally CAHWs used PDP vehicles and load camels so they could undertake mobile outreach services.
- It ensured that the quality of services, conduct and ethical behaviour of CAHWs was professional.
- FARM-Africa and GTZ adopted a joint approach in Marsabit. They lobbied vigorously to legalize the role of the CAHWs, which the Kenya

Veterinary Board now recognizes and accepts. The issue of their legal status must now be taken to parliament. Providing CAHWs with a forum within which to lobby for change is important.

BUT . . . other issues still remain to be resolved:

- the cost of supervision, which limits government involvement
- insecurity among some communities, which limits accessibility
- conflict with some traditional beliefs and practices; for example traditional healers are often paid in kind or paid months later, undermining the need for CAHWs to charge full costs and be paid cash to remain operational
- the vast area to cover
- the limited number and types of cases the CAHWs can handle
- how to ensure that the effort of maintaining mobility and gaining access to the remotest herds pays

Links with other organizations

- *Create working relationships* for the CAHWs with other organizations and agencies involved. These include the government veterinary department, the veterinary officers and the pharmaceutical companies. Collaboration and good working relationships, both professional and commercial, benefit all those involved in animal health care. The CAHWs will perform better, and the community will receive better service, care and supplies.
- *Encourage community involvement.* Support community and CAHW information forums. Participate in field days, agricultural shows, camel derbies and similar events. Work towards getting the community to recognize and support the operations of the CAHWs. Improving the quality of service and the disease surveillance in the districts will help accomplish this aim.
- *Reduce conflicts among different development agencies*, which may have different operational policies, and avoid duplication in their work. Working alongside FARM-Africa on livestock development are GTZ and the government of Kenya; on human health problems, Médecins sans Frontières and Consolata Catholic Missions (CCM).
- *Create networks* among all organizations and agencies involved to exchange experiences and ideas.

- *Look at other services or activities* that the CAHWs can perform, such as delivering human health services and engaging in petty trade.

BUT . . .

- A potential limitation remains that external funding will likely be needed to facilitate regular meetings between different organizations.

Dual role in health care

Digir Turuga of Bayo Location in Ngurunit region has been trained as a community-based health worker, first in animal care and later in human health. When he completed his animal health care training in 1996, he received a drug kit worth KES 25,000. He now keeps his drug kit stocked at a level of about KES 16,000. He has invested some of his profits into a livestock business. Through his work, his income has increased, he has raised his social status in the community, and he now proudly states that he goes to bed with a full stomach and keeps his children in school.

Robert Masibho, district project coordinator, Samburu

Veterinary drug supply

A reliable supply of quality drugs is crucial to providing animal health care. The animal health assistant supports the CAHWs by supplying them with drugs and supervising how they give service and administer the drugs. The PDP gave this system a start by giving loans to two AHAs to establish veterinary drug stores, one in Samburu District and one in Marsabit District. These stores, which are still functioning, have the following advantages:

- The AHAs have access to reliable and inexpensive drug sources through their scale of operation.
- The CAHWs have ready access to reliable drugs of good quality, which are convenient to obtain and affordable in price.
- This access reduces the chances that the veterinary drugs will be abused or misused.

BUT . . .

- The AHAs who operate the stores must be committed and innovative.
- The credit facilities available to them are limited.
- 'Quacks' or untrained suppliers may still compete with these legitimate supply sources.

Sustaining health care in the community

An Italian NGO, COOPI (Cooperation International), approached FARM-Africa in July 2000 to collaborate on an emergency animal health programme in Marsabit, Moyale and Samburu Districts. What had become apparent during the drought was that, as few sick animals were requiring help from the trained community-based animal health workers (CAHWs), they had let their drug supplies run down, using the cash from sales to buy food and other essential supplies.

As the Pastoralist Development Project was winding down, the plan was that two newly established local NGOs, CIFA (Community Initiative Facilitation Assistance) in Marsabit and Moyale and Ramati in Samburu, would carry on with animal health care and other PDP activities in their areas. The assistance from FARM-Africa and COOPI was to enable the CAHWs to restock their supplies and continue with the work they had been trained to do. A qualified veterinarian, whom COOPI recruited, supervised the aid overall; trained animal health assistants provided local supervision, and the CAHWs carried out most of the work themselves.

Each CAHW was initially paid KES 6000 a month for their services, with half in cash to cover their day-to-day living expenses and half in drugs to replenish their stocks. In all 140 CAHWs—60 in Samburu and 80 in Marsabit/Moyale) benefited from the programme. They in turn treated 124,000 animals in Samburu, 51,000 in Marsabit and over 10,000 in Moyale. Pastoralists paid for the health services at the rate of 1 goat for every 75 goats or 50 sheep or 40 cattle, or 10 donkeys or camels treated. Approximately 2500 animals were earned in payment, which were slaughtered locally and the meat was given to local schools.

The system provided CAHWs with support and supervision, involved them in vaccinating and treating animals, helped them earn an income and replenish their drug supplies, and gave them practical training on treating animals diseases with drugs that were new to them.

Brian Heath, PDP team leader

Sustainability

Training is of little or no benefit to the recipients and the community if the trainees cannot put into practice what they have learned. For them to be of continuing help to their communities, the local animal health activities must be sustainable. The community and its animal health workers must be able to carry on their activities without outside help. Yet the CAHWs need material, logistical and technical support in their programmes. There is a great need for

- initial start-up equipment and drug kits
- regular refresher courses
- regular monitoring, support and supervision

- links to AHAs, pharmaceutical companies, district veterinary officers, development agencies, communities training in managing a small business enterprise
- diversified investments, to ensure survival

To assure sustainability, a district body is needed to take over after the NGO leaves. This could be a pastoralist association or a similar group in the district. Furthermore, to make the community work most effective, there must be peaceful coexistence among the different ethnic groups.



Good practices

On average the CAHWs visited and served even the most remote locations in the rangelands, roughly 6 times a year, when they diagnosed and treated animals and discussed animal health concerns with their owners. Because the CAHWs made their communities aware of the services that they could provide, the communities used more veterinary services and took more advantage of referral services.

Lessons learned from PDP

- An organization must be consistent in how it applies its operational policies to ensure trust and respect.
- Chances of success are higher when the support given is to a community's own initiatives.
- To reach consensus on crucial issues of community development, district forums for pastoralists on animal health should be promoted and supported.
- Action plans drawn at the end of every engagement with the community promote responsibility and accountability.
- Development agencies should harmonize their training curricula and approaches to ensure uniformity.
- Training should be practical and of immediate use.
- Selection criteria for trainees should be determined by the community members with proper guidance from the development agency sponsoring the course.
- Concerns on areas of coverage, gender and potentials for competition among CAHWs, AHAs and development agencies need to be addressed.
- By using CAHWs in all animal health interventions, development agencies will promote growth of local initiatives.
- Gender considerations should be promoted in community-based animal health work, and women should be trained to care for all classes and types of livestock.
- Providing the training participants with free handouts compromises the sustainability of the programme. Only information should be handed out freely.
- Cost sharing increases chances that benefits gained from the assistance given will be sustained.
- When CAHWs are encouraged to diversify their businesses, they can remain active throughout the year.
- A reliable supply of quality veterinary drugs increases the chances of investment in the livestock industry.
- Cooperative veterinary drug stores are not feasible since members cannot realize immediate returns on their investment.
- Regular refresher training is essential.



Recommendations

- Participant success can be increased by assuring the quality of the training and training methods and giving the CAHWs adequate support.
- Microcredit schemes need to be developed that are suitable for pastoral regions.
- CAHWs should receive training in microenterprise management as well as their veterinary training.
- Increasing training of pastoralists through pastoral training centres, mobile training teams or pastoralist associations will benefit the livestock industry tremendously.
- CAHWs need to be legally recognized by parliament and supported to deliver animal health services.
- Insecurity in pastoral regions needs to be dealt with firmly.

Abbreviations

AHA	animal health assistant
ASAL	arid and semi-arid land
CAHW	community-based animal health worker
GTZ	German Technical Assistance
KES	Kenya shilling, valued at about 75 to 1 US dollar
NGO	non-governmental organization
PDP	Pastoralist Development Project

Notes

- ¹ Kenya Ministry of Agriculture and Rural Development, 'Policies and strategies for the delivery of veterinary services in Kenya', draft paper, February 2002.
- ² A lot of research was carried out on the PDP demonstration herds, especially on trypanosomiasis and mastitis by the Kenya Trypanosomiasis Research Institute and Egerton University, respectively. Beyond the periodic sampling of herds the longer-term plan to carry out research and monitoring of pastoralist herds was not sustainable.
- ³ Community members were often pressured by traditional values, such as respect and blood ties, to provide credit or free services to certain members of their own family or community, thereby undermining the sustainability of the service. Sometimes selecting a local person, but one not from the immediate community, could avoid these traditional pressures.

