LEARNING & ANALYSIS BRIEF

PharmAccess FOUNDATION

THE FINANCIAL AND HEALTH DIARIES

WHAT FACTORS INFLUENCE THE DECISION TO ENROL IN HEALTH INSURANCE IN RURAL KENYA?

Farmers who are members of the Tanykina dairy company can insure themselves and their family through The Community Health Plan, a local health insurance program in Nandi County, Kenya. Tanykina deducts insurance premiums from farmer's milk deliveries to the dairy company. Insurance coverage is therefore partly dependent on regular and sufficient milk deliveries. This Financial and Health Diaries study in Kenya investigated how cash constraints, health shocks, and milk production and supply influence enrolment in the insurance program. Uninsured members of Tanykina dairy tend to sell a larger share of milk to other buyers in weeks when they experience a health problem and need immediate cash. Insured members on the other hand do not decrease their sales to Tanykina when coping with an illness, suggesting that insurance shields farmers from medical out-of-pocket expenditures.

Financial institutions offering health insurance often prefer to collect their premiums infrequently, for instance once a year. This may hinder poor households from taking up insurance, as it can be difficult for them to pay the annual premium in one go. One way to collect the premium more frequently and conveniently is to offer health insurance through employers or farmer-owned organizations that automatically deduct premiums periodically, e.g. on a monthly basis. In theory, this should reduce financial constraints and increase enrolment into the insurance program.

The Health Insurance Fund, PharmAccess Foundation, and the insurance company AAR began offering health insurance through farmer-owned organizations in Kenya in 2011. They introduced The Community Health Plan (TCHP) to farmers who deliver their milk to Tanykina Dairy in Nandi County. Enrolment in the insurance program was slow and only 11% of the target population participated in the program in 2013.

This Financial and Health Diaries study in Kenya investigated how cash constraints, health shocks, and milk production and supply influence enrolment in the TCHP program. Tanykina deducts the monthly insurance premium from farmers' milk deliveries and dropping out seems to be closely linked to the volume of milk delivered to Tanykina each month. The volume can vary for two reasons: (i) fluctuations in milk production and (ii) selling to others, such as hawkers, traders or local shops, and vendors. This study focused on farmers' dairy supply to the organization and examined whether reductions in milk supplied to Tanykina were due to farmers' *ability* to produce (too little milk production) or *decision* to sell milk to Tanykina (selling to other buyers).

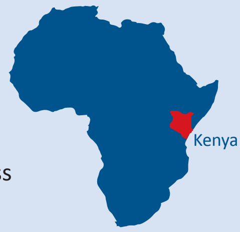
The study followed 120 households delivering their milk to Tanykina on a weekly basis from October 2012 to October 2013. About half of the households were insured through TCHP at the beginning of the study, the other half was not insured. The Financial Diaries recorded all weekly financial transactions, such as income, loans, gifts, savings, and purchases for all financially active adults in these households. The Health Diaries recorded health events for all household members, e.g. illnesses, injuries, medical expenditures, and consultations at healthcare providers. In addition, the study collected data on the milk production of each household.

Main findings

Suspension and dropouts from the insurance scheme

During the study period, only 9% of the uninsured households enrolled in TCHP for the first time. In addition, 48% of the initially insured households dropped out from the scheme and another 21% were suspended at least once because they had insufficient funds in their Tanykina account to pay for the monthly premium. Suspended farmers paid twice the premium in the subsequent month to re-activate their healthcare coverage. In line with expectations, suspensions and drop-outs occurred most often during the months in which a household sold the least milk to Tanykina. Farmers who were suspended at least once delivered on average 69 kg of milk in months when they paid their premium, but only 4 kg of milk in months in which the premium was not paid.

KEY COUNTRY FACTS



44.4 m
population
(75% is rural)

43.4%
of people live on less than USD 1.25 /day

44.6%
of people's spending on healthcare is out-of-pocket

– Based on 2012 and 2013 World Bank and World Health Organization data.

STUDY FACTS - KENYA

The Diaries study tracked low-income households over the course of a year to collect highly detailed data on how families manage their finances on a day-to-day basis and what kind of health problems they experienced. This research reveals hard-to-see aspects of the financial and health lives of rural Kenyans, providing new insight for the design of insurance marketing strategies, programs and quality improvement efforts.

120
households investigated

207
adults interviewed weekly for one year

PROGRAM PARTNERS

AAR Kenya
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Health Insurance Fund

RESEARCH PARTNERS

Amsterdam Institute for International Development
Ipsos Synovate

Figure 1 **Average weekly milk production by month.**

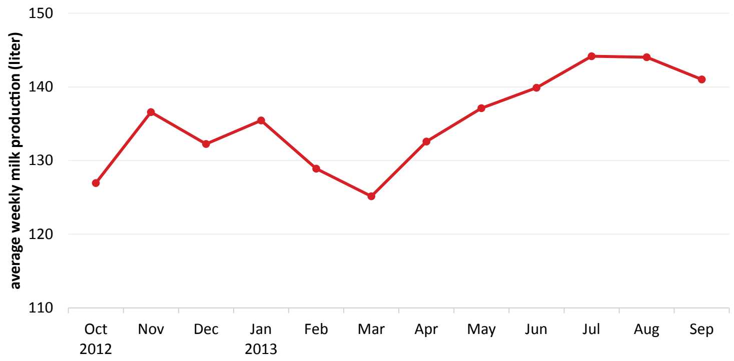
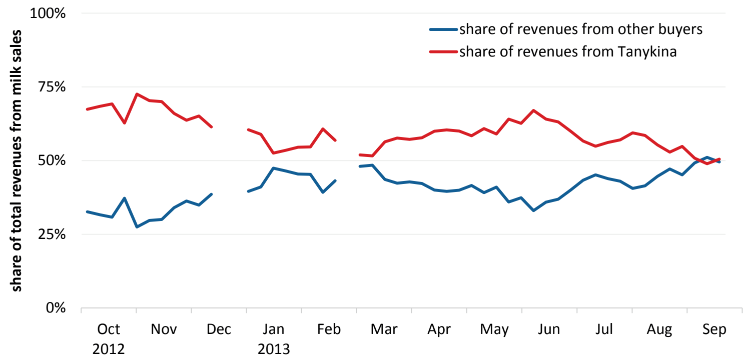


Figure 2 **Share of revenues from weekly sales to Tanykina and other buyers.**



Milk production, sales to Tanykina and side-selling

Ability to deliver to Tanykina (production): The average total weekly milk production did not fluctuate significantly, although the amount of milk produced increased slightly at the beginning of the wet season (Fig. 1). This suggests that fluctuations in milk production alone cannot explain the reduction in milk deliveries to Tanykina and the subsequent suspensions from TCHP.

Decision to deliver to Tanykina: Suspensions from TCHP may be due to side-selling to buyers other than Tanykina. While the share of weekly revenues from sales to Tanykina was around 70% in October 2012 and only around 30% for other buyers, sales to Tanykina steadily decreased throughout the year. By October 2013, households sold as much milk to Tanykina as to other buyers (Fig. 2).

Reasons for side-selling

Selling to Tanykina is attractive as Tanykina pays a higher-than-average price for the delivered milk. On the other hand, Tanykina pays farmers only at the end of each month. Other buyers pay cash immediately to farmers. Therefore, households in need of cash may prefer to sell at a lower price to another buyer. When looking at the selling behavior, two scenarios were common:

- In weeks with abundant milk production and without unusual financial obligations, households sold a large share of their milk on credit to Tanykina.
- In weeks with lower milk production and in weeks with large expenditures (mostly on farming and business), farmers sold to other buyers who paid in cash.

Health problems and milk sales to Tanykina

Milk sales to Tanykina decreased significantly when an illness or injury occurred, but only when farmers were uninsured. The insured kept their Tanykina sales at a steady level in the event of an illness in the household. These patterns may reflect a need for immediate cash on hand for the uninsured who have to pay for medical expenditures and therefore turn to other buyers who pay in cash immediately, while for the insured, medical expenditures are partly covered by TCHP. In fact, for the insured, the occurrence of a health shock may encourage or remind them to ensure they have sufficient funds on their Tanykina account to cover the TCHP premium.

Conclusion

There may be benefits of offering health insurance via farmer-owned organizations, not only from the perspective of a health insurance provider (through reduced transaction costs), but also from the perspective of farmer-owned organizations (through increased loyalty and reduced side-selling by members).

TAKE HOME MESSAGES

- Farmers who decrease their sales to Tanykina are more likely to drop out of the insurance program.
- Farmers sell a larger share of their milk to other buyers in weeks they need more cash. Increasing farmers' liquidity (for instance through cash-on-delivery or better loan provisions) in such weeks may help prevent side-selling and retain farmers in the insurance program.
- Uninsured members decrease Tanykina sales when they experience a health problem, and turn to other buyers instead who pay in cash albeit at lower prices. Insured members on the other hand do not decrease their sales to Tanykina when coping with an illness. This suggests that insurance shields farmers from medical out-of-pocket expenditures and reduces their need to accept lower earnings in return for immediate cash.

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