

FINAL EVALUATION REPORT - by Pascale Debord (Agriversal Ltd)

Independent evaluation of the François-Xavier Bagnoud programme in Villupuram district (Tamil Nadu, India), supported by TF (Switzerland) from 2009 to 2012 (FXB Village 1) and from 2013 to 2015 (FXB Village 2)

Field Phase from 05/12/2016 to 21/12/2016 – Final Report Date 13/04/2017

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⇒ Lessons learned and recommendations are highlighted by an arrow under each relevant section/paragraph.

Acronyms

- ASHA - Accredited Social Health Activist
- ANM - Auxiliary Nurse Midwife
- CK - Chinna Kalapet = habitat included in FXB programme for Village 1 (FXBV1)
- CLG - Common Livelihood Group
- CSR - Corporate Social Responsibility
- FXB - Association François-Xavier Bagnoud (Geneva-based)
- FXBIS - Association François-Xavier Bagnoud India Suraksha (Delhi-based)
- FXBV1 - FXB Village 1 = Mathur Chinna Colony + Chinna Kalapet; depending on the context, it can also mean FXB project for Village 1
- FXBV2 - FXB Village 2 = Mathur Periya Colony (MPC); can also mean FXB project for Village 2
- FXBV3 - FXB Village 3 = Nesal; can also mean FXB project for Village 3
- HH - HouseHold
- IAG - Inter Agency Group
- IGA - Income Generating Activity
- MCC - Mathur Chinna Colony = village included in FXB project for Village 1 (FXBV1)
- MPC - Mathur Periya Colony = village included in FXB project for Village 2 (FXBV2)
- MPI - Multidimensional Poverty Index
- MSC - Most Significant Change
- PLHA - People Living with HIV AIDS
- PHC - Primary Health Centre
- PLF - Panchayat Level Federation
- PUT - Pondicherry Union Territory
- PIMS – Pondicherry Institute of Medical Sciences
- PRI - Panchayati Raj Institution
- NREGA - National Rural Employment Guarantee Act
- RO - Reverse Osmosis
- SHG - Self-Help Groups
- SNU - Sanitary Napkin Unit (Collective IGA of FXBV2)
- TF – The Trafigura Foundation
- ToR - Terms of Reference
- WATSAN - Water and Sanitation

A screenshot of the project area in Tamil Nadu

PIMS and Kalapet are located in Pondicherry Union Territory, all other selected sites are in district Villupuram, Tamil Nadu (source: Google Earth)



EXECUTIVE SUMMARY

Since 2010, the Indian branch of the Geneva-based NGO François-Xavier Bagnoud (FXB India Suraksha, FXBIS) has been present in Tamil Nadu, implementing successively two projects based on the FXB Village model, a three-year integrated rural development model aimed at eradicating extreme poverty and underpinned by a community-based approach. Two such villages were supported by the Trafigura Foundation (TF): Mathur Chinna Colony (MCC) is also known as FXB Village 1 (FXBV1 – 2010-2012, about 100 beneficiary Households or HHs) and Mathur Periya Colony (MPC or FXBV2 – 2013-2015, about 50 beneficiary HHs). Both are located in Mathur Panchayat (district Villupuram). In addition, FXBV1 was also implemented in nearby Chinna Kalapet (CK), a vulnerable community living in Pondicherry Union Territory. All targeted households were below the poverty line (USD 1.25/day/person in 2010). The programme is still continuing with FXBV3, a project implemented in nearby Nesal village (not supported by TF).

The programme addresses the needs of landless rural HHs whose capacity to break the vicious circle of poverty remains limited by the lack of job opportunities and productive assets, the difficulty for children to pursue education and persistent social prejudice against Dalit (lowest cast, underprivileged) communities. Besides, in coastal Tamil Nadu, the resilience of the poorest is often tested by natural disasters (e.g. Thane cyclone in 2011). Access to health care continues to be limited in rural areas and college education - a powerful driver of change for any rural family- is too distant a dream, given its cost. Government welfare schemes exist at national level (e.g. NREGA or National Rural Employment Guarantee Act, a large public works programme) and at state level but are not sufficient to lift people out of poverty.

Against this background (similar for FXBV2 and FXBV1, except for CK, which is a semi-urban colony, not a rural one), the objective of FXBV2 -the focus of this ex-post evaluation- was “to develop successful and autonomous social entrepreneurs enabling 48 rural women of MPC to develop a steady and sustainable economy and help improve overall quality of living of their families”. This was to be achieved through activities revolving around three components: Income Generating Activities (IGAs, including skill building, development of poultry farming, manufacturing of sanitary napkins and manufacturing of coir rope); Health including sanitation & nutrition-related activities (health camps, latrines, awareness, trainings, nutritional support, kitchen garden, day care centre); Education (support for school fees and materials, supplementary education centre, computer training). This evaluation also aimed at drawing lessons from the experience of FXBV1, four years after its completion. The terms of reference were in line with the typical objectives of an ex-post evaluation (a focus on design, impact and sustainability). The methodology was based on an open dialogue with beneficiaries, influenced by the Most Significant Change technique and the concept of participatory evaluation.

The timing of the FXB programme is very opportune and the IGA component is especially relevant. Indeed, of all the constraints MCC and MPC residents face, the lack of job opportunities is probably the most critical, as a result of structural changes in the local labour market in the last 15 years. Besides, one salary cannot sustain the HH and women too are looking for a job. However, they are not as mobile (i.e. free) as men. Until the arrival of FXBIS, NREGA was their only opportunity to earn money: in spite of low wages (about INR 130/day), the scheme attracts women because the work is less taxing than agricultural labour. But NREGA was designed to provide a maximum of 100 days of work per year and per person and is simply not enough as a means of subsistence.

This explains why the best response to IGAs introduced under FXBV1 came from women though activities were not specifically designed for women. Building on the lessons of FXBV1, FXBV2 designed three collective IGAs for women. Today, 7 women produce coir rope and 9 women make sanitary napkins. However, the poultry farm is run by 10 men from MPC: because poultry farming is not a labour-intensive activity, men saw it as a complementary activity and decided to take charge of the activity. It was their decision, not the decision of FXBIS. Hence the ownership of this collective IGA is with men. However, the project staff has not taken stock of the lesson: 1/ the situation is certainly not negative (the unit is profitable and benefits 10 HHs), but is nevertheless a missed opportunity in terms of women empowerment; 2/ the fact that men run it as a side activity may influence the management style, which is far from optimal; 3/ women ownership might have led to a different use of the income: women involved in other collective IGAs tend to save all the money they earn but there is no evidence of savings mechanisms with men.

Education is a domain where the government has a strong presence locally. But there are issues: how to elevate and sustain the performances of children from vulnerable families and how to make sure they pursue the complete academic cycle and perhaps reach college? Often uneducated, Dalit parents have a clear understanding that education is the single most important factor of long-term socio-economic change: a child who goes to college has the potential to lift the entire family out of poverty. To this end, the integrated design of the FXB programme was highly relevant: 1/ the education component complemented the governmental action by addressing the specific needs of poor families (transporting the children to school, coaching them after class hours, helping with supplies); 2/ the IGA component was designed to increase incomes and thus potentially contribute to savings for education; 3/ Besides

activities related to sanitation, nutrition, hygiene and better health-seeking behaviours were meant to improve health and hygiene, a precondition to quality learning for the children on the long term.

Relevance also stems from the adequacy between the design of the action and the implementing capacity of the NGO. The FXB model is ambitious because underpinned by a “short duration cum high impact” approach (i.e. core activities implemented very early in the life of the project), entailing a sustained pace of implementation in a difficult context: frequent cultural/religious events, climatic risks and poor infrastructure are a recipe for delays. Besides FXBIS had to build a local capacity from scratch to implement the programme and the local team was always modest (4 full time staff for FXBV2). However, potential implementation issues were compensated by the size of the target groups (100 HHs under FXBV1, 48 HHs under FXBV2), small enough to allow for meaningful interactions between the project staff and every HH. Anything bigger or more geographically dispersed would not have been manageable by the project team.

The design of FXBV2 benefitted from lessons learned during FXBV1 (under FXBV2, focus on marginalized women vs. families; collective approach vs. individual IGAs). Besides, many adjustments were made to the design during the implementation in response to changes in the context and the evolving needs of the beneficiaries, a sign of reactive and responsible management. Most of these adjustments were appropriate and did contribute to increasing the relevance and the impact of activities: e.g. the addition of a school van to transport children from their homes to the evening coaching classes was a relevant addition. On the negative side, the reporting to TF failed to highlight and document the complexity of the project, the design changes and the implementation challenges. This has been detrimental to the clarity of the intervention logic from an external perspective. For instance, the issues related to the performance and the sustainability of the production of sanitary napkins (one of the three collective IGAs) were not discussed in the final report to TF. The annual reports to TF were aimed at demonstrating progress but were too descriptive and failed to acknowledge and analyse the nature and the magnitude of the challenges (except for the sanitation component).

Though It is not easy to keep track of the exact number of HHs still involved in IGAs (e.g. the frontier between the collective IGAs is sometimes porous; besides FXBV1 ended in 2012), at the time of the evaluation at least 30 HHs were still benefiting from the income generated by a collective activity under FXBV2. Discussions with beneficiaries and the project staff confirm that most of the individual IGAs introduced during FXBV1 and FXV2 have been sustained (but not all of them). Whether individual or collective, the IGAs promoted by FXBIS have had a positive impact on the individual income of the targeted beneficiaries. However -in the context of the FXB programme- there is no evidence that collective IGAs offer any superior economic benefit, as compared to individual IGAs, which tend to generate higher monthly incomes. Collective IGAs are nevertheless associated with many intangible benefits and their effectiveness goes beyond monetary benefits: 1/ faster and more effective empowerment processes (as compared to an individual IGA); 2/ precious productive assets created for the target group (e.g. the poultry shed) 3/ collective IGAs broaden the scope of occupations, which can be developed in a rural context.

The individual income generated by IGAs contributes to the overall family income but is rarely sufficient to sustain a HH, as evidenced by the fact that beneficiary women-headed HHs tend to multiply occupations and sources of income: however, without the IGA-related income, these HHs would be today in a dire situation of emergency. The rise in income has contributed to improving the living conditions of most beneficiary family in both villages, judging by the multiplicity of answers to the simple question “what have been the most important changes in your life over the past few years?”. Responses include, among others: a permanent occupation, no more debts, being able to pay for college education, acquisition of a motorbike, etc. Another benefit: less money-related conflicts (though we cannot deduct domestic violence has been reduced). Interviews with several stakeholders confirm the key role FXBIS played in improving the economic condition of the Dalit population of both MCC and MPC, a role strongly facilitated by the special bond forged between the population and the NGO, which was the first to provide emergency relief after the Thane cyclone in 2011.

On the negative side and in spite of resilience built through FXBV1 and FXBV2, the targeted communities are still vulnerable to external shocks such as climatic events and serious health-related issues, which may force them to abandon an IGA and sell productive assets. In this case, people often go back to square one: agricultural work for men, NREGA for women. The head of Mathur village confirms a large number of women from Mathur (as much as 40% to 50% of the HHs) regularly work for NREGA. Besides, the absence of a day care centre (implemented but stopped after FXBV1, and stopped mid-course under FXBV2) prevents younger women from participating into the programme income-generating activities.

Under FXBV2, three collective IGAs were developed by three “Common Livelihood Groups” (CLG). They have achieved various levels of performance across the scale of profitability, ownership and sustainability.

The coir unit is profitable and the ownership is excellent. Women are empowered: they master the economics and the logistics of the production. They run the unit by themselves. Further sustainability prospects are promising although

the group has no institutional capacity of its own. Developed in March 2014, the unit was run by FXBIS (women were paid monthly on the basis of daily attendance) until it was handed over to the coir CLG in February 2016, since the activity was profitable. 7 women (in production) and 2 men (in marketing and accounting) now run the coir unit. In September 2016, the group decided to increase daily individual wages from INR 125 to 160 (i.e. a substantial 28% increase), an indication that the performance of the unit further improved under the management of the CLG.

The poultry unit is also profitable but profit is at risk, owing to management weaknesses. The ownership is reasonably good but FXBIS is still involved in some aspects of the management: e.g. relationship with the supplier, key market information and sometimes the provision of working capital. Provided management is improved (by strengthening the monitoring of indicators and linkages with the supplier), provided full ownership of the activity is boosted through appropriate measures (provision of seed funds and complete control over management), sustainability prospects are good. A poultry barn with a capacity of 1500 birds/batch was built on the “campus” of FXBIS. The first batch started in December 2013 and the unit has been operating for three consecutive years for a total of 12 batches (as of December 2016). The poultry CLG is comprised of 10 men, assisted by a few women for intensive manual activities (e.g. cleaning). Though all 12 production cycles have generated a profit (ranging from INR 6,620 to INR 58,171), the technical and economic performances of the unit are not properly monitored owing to a poor understanding of how to manage a poultry unit. Calculations made during the evaluation show the values of key indicators (e.g. mortality rate, feed conversion rate) are not good enough. The fact that profit was systematically positive in spite of average to bad technical performances suggests room for improvement and higher profits. As for institutional capacity, the group does not have a bank account, supplies are paid by whoever has enough money to pay for the invoice (accounts are squared when the chicken are sold). The profits are too small to allow for capital build-up.

The sanitary napkin unit is still run by FXBIS. It is not profitable and not sustainable. The group has an ownership of the production processes owing to the technical skills women have developed but is not empowered with management issues: they understand the unit cannot operate smoothly due to supply issues, it is unclear whether they really know why raw materials are not provided on time and why they are not able to work as often as they used to. Surfing on the momentum built around women-run cottage SNUs in other parts of Tamil Nadu, FXBIS started two SNUs in parallel to FXBV1, both supported by the Fondation ELLE. One unit closed when FXBV1 ended, suggesting it was not profitable. The other was ravaged by floods in 2015 and was not restarted because of supply-related issues. Under FXBV2, another SNU was started in September 2013 with a group of women from MPC and the equipment from the old unit. The SNU was installed in the office of FXBIS. 9 women from MPC were trained. The production is focused on maternity pads for government hospitals. The women are wage workers: they are paid monthly by FXBIS on the basis of daily attendance recorded by the staff. The unit is not profitable because the production cost is higher than the market price (i.e. what hospitals are willing to pay). But FXBIS made a decision to keep it afloat after the support of TF stopped because the management considers the SNU plays a strategic social role for the community and contributes to good health/hygiene. Does it? The true economic impact of the SNU for the group members was evaluated during this mission on the basis of raw data extracted from the registers: the average number of days of work per woman and per month has considerably declined since 2013, and so has -mechanically- the average monthly income. They used to work about 18 days a month in 2013 and earn about INR 2250/month, but they worked only an average of 7 days/month in 2016 and earned INR 850/month. The reason for this sharp decrease is not structural (holidays and electricity cuts were always an issue) but operational: supplies were not available because the unit is not profitable. The project team insists it is beyond its control but would supplies be missing if the unit was profitable? No. Supplies would be managed to avoid interruption in the flow of raw materials. As result, women would be able to work more regularly and would earn more. Currently, the more the SNU produces and sells at a “subsidized” rate to the government, the more it loses money. It is estimated that the SNU lost INR 1.81 for each sanitary napkin manufactured and sold in 2016, totaling a loss of INR 76,858 until 30/11/2016 (about USD 1147 @ USD 67/INR). The situation is certainly not an incentive to run at full capacity. Consequently, 1/ not only the SNU is losing money but 2/ its social mission vis-à-vis the group of 9 women is slowly but surely failing 3/ FXBIS staff is wasting precious time and energy in running an unprofitable activity and is distracted from more essential objectives. Besides the unit is no longer useful for the promotion of napkins. Indeed, this is the true impact of the SNU: the use of pads has spread among women and adolescent girls and there is no doubt the SNU triggered a positive dynamics. But women now buy branded products because the SNU only produces maternity pads for hospital use. Acknowledging that the activity is no longer useful (i.e. not just the fact that “the unit is losing money”) is difficult but is the first step to solving an issue and making the right decisions. This is not a recommendation to abandon the women but a suggestion to consider closing the unit, with a proper strategy to reorient women who are probably more flexible and willing to switch than the project staff thinks. Important lessons learned include: 1/ make sure that collective activities developed for underprivileged communities are viable, i.e. there must be an established market for the products; 2/ A social enterprise can only play its social role if it is economically profitable and sustainable.

The collective model developed under FXBV2 is basic, underpinned by the concept of Common Livelihood Group (CLG), i.e. a small group of individuals engaged in collective production and marketing. It has nothing to do with a

cooperative. Common Livelihood Groups have no official existence. The situation has benefits (e.g. hassle-free from an administrative standpoint) and drawbacks (the CLG has no institutional existence, no bank account, is not eligible for loans, etc.). The intention to build the institutional capacity of the groups was there but was not pursued. However, for the activities whose profitability is established (coir and poultry), the lack of institutional capacity may hamper their development.

A number of evidences point to a substantial and sustainable improvement in the health of the targeted population under FXBV2: 1/ the project has addressed the causal factors related to illnesses through a combination of preventive (awareness), curative (health camps) and promotive (toilets, safe drinking water at school and at home) measures; 2/ surveys conducted by PIMS in Villupuram confirm the improvement; 3/ during interviews, beneficiaries confirmed a better knowledge and understanding of diseases; 5/ better income have translated into better nutrition (more vegetable). On the negative side, people have expectations, which cannot be met: once the local medical presence (regular camps) is discontinued and even though they have access to health care facilities, people are not as proactive about their health as they should: distance to health facilities and the fear of medical costs interfere with positive health-seeking behaviours. Besides, health remains a factor of vulnerability, evidenced by the fact that some IGAs (at least two examples in FXBV1, one under FXBV2) had to be abandoned because of health issues.

The sanitation component is a big success among the population, the toilets being unanimously considered as one of the most important changes under FXBV1 or FXBV2. The usage of toilets has spread among the HHs, attitudes have changed, open defecation has disappeared. Female members of the family benefit more than men (i.e. "toilets" means the end of harassment). Sustainable improvements have also been made in personal hygiene and access to safe drinking water: for instance, the role of water-borne diseases is better understood and women boil water more frequently when preparing meals. A virtuous cycle was triggered by the realization that the health of the community was improving over time, which further encouraged the adoption and continuation of hygiene-related measures. This includes the use of sanitary napkin: the improvement in the level of comfort and hygiene is such that this is not a habit women will abandon. As for nutrition, the impact is mixed with positive outcomes on one side (higher income allows for the purchase of vegetables) and unsustainable results on the other (e.g. day care centres, kitchen garden).

Access to health care has improved, in theory: the number of health care facilities has not changed but a large number of people (quantitative data are not robust enough to be presented in this report) have been exposed to the health system and were able to receive treatment during health camps organized by the Pondicherry Institute of Medical Sciences (PIMS), a large missionary hospital, a major stakeholder in Villupuram and the partner of FXBIS since the start of the programme. PIMS has run health camps under both projects and continues to do so under FXBV3, implemented in the nearby village of Nesal. At programme level, the financial sustainability of the camps has drastically improved over time because PIMS now has a large charity fund (Corporate Social Responsibility, CSR). Camps are opened to all segments of the population but the highest participation mostly came/come from women and children, also considered -rightly- as the main drivers of change in health and hygiene behaviour at family level. Patients attending a camp were given a PIMS card, which is a pass for (supposedly) free consultation and treatment. On the paper, this all bodes very well for the sustainability of access to health care for people living in MCC and MPC. In reality, there is evidence that people from MPC tend to avoid treatment, many do not even know about the evening clinics held weekly by PIMS in nearby Nesal, and they do not go to nearby PIMS because it is both too costly to go and to visit (some procedures have a cost). People want a regular medical presence at their doorstep. But for beneficiaries, the end of the project (FXBV2 and FXBV1) meant the end of a regular medical presence. On the positive side, they now know how to approach health-related issues: this is an intangible but sustainable achievement. People approach diseases with a better attitude: they are aware of diseases, treatments and follow-up processes. As for tangible results, according to PIMS, the incidence of cholera has decreased where toilets have been installed in Villupuram district and acute diarrhoeal diseases -also a cause of morbidity and mortality- have also come down. Even though health seeking behaviours have improved, vigilance is a must because critical health issues have not entirely disappeared in the targeted areas.

The success of the education component can be measured by the continuation of a minimum level of support of FXBIS to strategic activities. Indeed, education-related activities are rightly considered by FXBIS as the cornerstone of long-term empowerment processes and it was quickly realized that they could not be stopped after the end of each project (be it FXBV1 or FXBV2) without halting the strong momentum they had triggered, because governmental budget for schools is extremely low and cannot be tapped into. Therefore, a decision was made to maintain a minimum level of funding for a few strategic activities (e.g. transportation of children, salary of a teacher at primary level).

By facilitating access to education and the acquisition of academic skills, FXBIS has maintained a desire for school and encouraged the yearning of poor rural families for higher education. This can be appreciated from different perspectives: 1/ all children enjoyed evening classes, the only place they can study without distraction; evening classes are continuing but financially supported by another NGO. Elder children also benefitted from computer training sessions; 2/ the headmistress of the Mathur primary school confirms the high value of the evening classes:

better reading and writing skills, better level of interaction from the children who now finish their assignments. Another at the higher secondary school confirms and says the benefits were especially high for “slow learners”; 3 / as for parents, the dream they pursue is the “first generation student”, i.e. their child should be the first in the family to enter college, an achievement rewarded by state schemes; therefore parents welcome any activity having the potential to bring their children closer to this goal and are striving to save money for college education; they are especially fond of evening coaching classes and not only value the project for its education component but also for IGAs -which continues to strengthen their savings capacity- and for its health component, which kept their children healthy and fit for school.

The contribution of the programme to the economic empowerment of women in targeted communities of Villupuram was substantial and led to both tangible and intangible benefits: a better gender balance, increased confidence among women, stronger Self Help Groups (SHGs) and higher savings. Indeed the programme helped unleash potential human resources that had never been properly tapped into (most women had no permanent occupation). Though convincing women to adhere to the idea of collective activities was a challenge owing to socio-cultural resistance, none regretted their decision to join the project. They say the skills they have acquired and their positive contribution to livelihoods gave them much confidence. Men confirm, also pointing at the positive impact on the mobility of women and their exposure to the outside world, demonstrating that their own resistance to women mobility is fading. Empowerment processes have been triggered and are continuing because the economic benefits of the IGAs have been sustained for most women, except for younger women who cannot participate in activities due to the absence of a day care centre.

Self Help Groups (SHGs) and Common Livelihood Groups (CLGs) are two different things. But all female members of a CLG also belong to one of the 5 active SHGs, which pre-existed the FXB programme. They are registered groups, have their own dynamics and are part of a Panchayat-Level Federation (PLF). Apart from the fact the project team was instrumental in the formation of the PLF (during FXBV1), it played no direct role in the local SHGs. Besides there is no evidence that the amount women monthly contribute to their SHG has increased as a result of the project. However, there is evidence 1/ that women are able to repay the small loans they take from their SHG more easily because of a better income; therefore, by strengthening the financial situation of women, the project indirectly strengthens the sustainability of the SHGs; 2/ that access to credit has been improved as a result of the creation of the PLF, with credit used in priority for technical and/or higher education of children (the acquisition of productive assets comes next); 3/ of parallel savings mechanisms: a group of 16 women, comprised of individuals working in the coir unit and in the SNU formed a “chit” fund in 2014. Each woman contributes INR 1,000 per month (“we save our entire salary so that men do not take it!” they say) and the fund raised each month (INR 16,000) goes to the woman who needs it most.

From the role of implementing partner, FXBIS has progressively graduated to the status of key stakeholder in Villupuram district. Because all CLGs operate either on the campus or in the office of FXBIS, activities are now tied to the long-term presence of FXBIS. Since the start of the programme in 2010, FXBIS has progressively anchored its local presence and credibility. Besides the FXBIS team has developed many professional relationships with local stakeholders (e.g. PIMS, Pondicherry University, the Inter Agency Group, which is a consortium of civil society organizations focused on reducing disaster risk in Tamil Nadu). They confirm FXBIS has a strong presence and visibility locally. With the local authorities, FXBIS has carefully avoided duplicating the role of the government. Rather it has been striving to complement and add value to the governmental action. The stake of FXBIS in Villupuram was further raised with the purchase of a piece of land in June 2013 and the development of a campus dedicated to collective IGAs.

The commitment of FXBIS in Villupuram is strong: it has an expansion plan for at least another 5 villages. FXBIS has also demonstrated a capacity to attract co-funding (e.g. under FXBV1, FXBIS partnered with a vocational institute, which trained several youths). However, it is one thing to attract additional funds for a project financially secured (the main support for FXBV1 and FXBV2 was from TF) and another to raise funds to sustain benefits stemming from a project that has officially ended. De facto, the sustainability of the programme is critical because funding is required to continue implementing common minimum activities, such as education. On the positive side, FXBIS strives to raise funds locally (organizes and charges for trainings as part of its Entrepreneurship Development Program) and recoup some the costs of the campus (e.g. the coir unit pays the electricity bill, a fee is charged for computer trainings). Also on the positive side, since 2014, large Indian companies must engage in CSR activities: this provides new funding opportunities to NGOs such as FXBIS (it has a project funded by Whirlpool). However, some issues will not go away with CSR funds as it is hard to raise funds for supporting the Delhi-based management staff of FXBIS or advocacy-related activities.

The income-based poverty line is too simplistic an approach to poverty assessment. In May 2016, FXBIS conducted a multidimensional poverty analysis of the beneficiary HHs of FXBV2 and assessed the changes in values for 10 indicators (number of meals per day, access to health services, school attendance, water treatment, toilet use, roofing, house ownership, other assets, savings, debts) between 2013 and 2016. The main conclusions were: 1/ multidimensional poverty levels decreased significantly; 2/ all HHs fared better in all identified indicators but

“Ownership of Other Assets”, such as land or livestock, probably owing to natural calamities; 3/ a strong impact on sanitation and debt level; 4 / the programme “profoundly” increased the living quality of its beneficiaries. The ex-post evaluation, using a strictly qualitative methodology, confirms but nuances some of these findings. For instance, reducing debts is a major achievement. Time being the essence of development processes, debts must be repaid before savings are made, that is why savings have not drastically improved in 2016, (according to the poverty analysis). However, saving habits have continued to improve in 2016 and the number of HHs without savings would probably be lower if it was analysed in 2017. As far as education are concerned, the evaluation is also more nuanced than the poverty analysis. Indeed, school attendance has certainly improved as measured by the poverty analysis but the true contribution of the intervention -an improvement in the performances of the students and better long-term perspective- is not measured. In other words, there is more to the programme than an impact on poverty: long-term mechanisms (savings, education) and empowerment processes are expected to help HHs stay away from the grips of poverty.

Summary of recommendations

This is the list of summarized (simplified) recommendations, all to FXBIS.

Refer to the report for the complete corresponding recommendation in its context.

Relevance & Quality of the Design

R1. Progress reports should reflect internal strategic debates on implementation-related challenges. FXBIS should not refrain from highlighting, documenting and analysing issues in its reporting.

Impact - The role of the IGAs on the income and the livelihoods of the beneficiaries

R2. A beneficiary of FXBV1 (in CK) is a widow. She claims she never received her widow pension, saying there was much administrative confusion around her case, possibly corruption. This woman lives with HIV AIDS: this is a human rights issue that requires the attention of FXBIS.

R3. In its future interventions, FXBIS may want to address the need for a sustainable day care centre where the targeted communities are living and working.

Impact - Performances & Sustainability of the Collective Income Generating Activities

R4. FXBIS should explore the conditions and benefits attached to the official status of CLG.

R5. Poultry Unit. For each batch, the poultry group (ideally) must measure the performances and complete a table of indicators. In case a value is out of the control range (especially the percentage of mortality), the group should seek technical guidance from Pritha Broilers.

R6. Poultry Unit. For the sake of sustainability, risks can be minimized and profit maximized by improving technical skills, which can be achieved by securing and strengthening a mutually beneficial relationship with a trusted business partner, i.e. the company that supplies the chicks/feed and buys the broilers.

R7. Poultry Unit. The poultry CLG must be entrusted with the management of the unit and receive proper seed fund. The involvement of FXBIS in management decisions should be limited to solicited guidance. The presence of the poultry group on the FXB campus must be attached to performances. FXBIS should explore the possibility to formally register the poultry CLG to give it an institutional capacity.

R8. Sanitary Napkin Unit. Acknowledging the fact that the activity no longer serves its purpose is the first step to solving the issue. This is not a recommendation to abandon the women but to consider closing the unit and reorient women, to help them switch to a *proven* collective IGA, in which FXBIS could invest the amount provisioned in anticipation of the losses of the SNU.

R9. For the sake of efficiency, consider moving the FXBIS office in Kazuperumpakkam to the FXB campus.

R10. The relevance of building the institutional capacity of the coir and poultry CLGs must be assessed. If the relevance is established by both the groups and FXBIS, then FXBIS needs to explore the possibility to formally register the CLGs under the most appropriate Act in Tamil Nadu.

The contribution of the FXB programme to hygiene, healthcare and health-seeking behaviours

R11. FXBIS should inform the population of both Mathur colonies of the health-related events held under FXBV3. Informing the members of the CLGs is an easy way to spread the information to MPC residents.

R12. FXBIS should motivate PIMS to maintain a minimum presence in MPC and MCC through health camps, twice a year. Clarify the issue of treatment costs at PIMS for the residents of MCC and MPC?

R13. Explore the possibility to broaden FXBIS's health-related strategy by approaching institutions specialized in the promotion of safe traditional practices (if they exist) to treat common ailments.

From implementing partner to stakeholder: the role and sustainability of FXBIS in Villupuram district

R14. Acknowledge and discuss the risk (or dismiss it) that FXBIS might consider -unconsciously- the FXB campus as a form of compensation for the absence of institutional sustainability of the CLGs created under FXBV2 (or any CLG to be created on the same model). In which case, the risk would be to neglect the need for the institutional strengthening of the groups.

Summary of lessons learned

This is the list of summarized (simplified) lessons learned.

Refer to the report for the complete corresponding lesson learned in its proper context.

Relevance of the overall FXB programme & quality of the design of FXBV2

LL1. The decision that men -rather than women- would run the poultry unit was made by the beneficiaries, not by FXBIS. Does poultry farming lack relevance as a collective IGA for females in the rural context of Villupuram? When unplanned dynamics emerge from development processes, the NGO needs to take stock of the situation and adapt its strategy, unless these dynamics are considered fully positive. In the case of the poultry group, is it an issue that men -not women- are in charge? Is the poultry unit run by men as profitable as it would/could have been if it was fully run by women? Would women ownership have led to a different use of the earnings? These are questions which should have been asked and answered: they may have led (or not) to a different course of action.

LL2. Kitchen gardens for marginalized people who have a few square feet of land around their house can be a valuable nutritional concept provided the constraints are fully identified and the activity is well executed: the relevance of an activity is as much about its content as it is about the modalities of its implementation, i.e. a valuable but poorly implemented idea becomes irrelevant.

Impact – The role of the IGAs on the income and the livelihoods of beneficiaries

LL3. While collective IGAs are associated with many intangible benefits, there is no evidence that they offer -in the context of the FXB programme- superior economic benefits, as compared to individual IGAs, which tend to generate higher monthly individual incomes. Besides, individual IGAs may offer the opportunity to further increase productive assets (e.g. a female cow may give birth to another female cow), while the increase in productive assets is more complicated in a collective context, because collective assets are generally quite expensive and because it requires a proper institutional capacity, which the Collective Livelihood Groups currently do not have.

LL4. There is another intangible benefit to a collective IGA: a serious health issue may force an individual to retire temporarily or permanently from the collective activity but the productive assets will not be affected (they cannot be sold by one household) and the operation will continue running: the individual will have every opportunity to resume the activity if/when his/her condition improves.

LL5. Make sure that collective activities developed for the underprivileged communities are viable, i.e. there must be an established market for the products.

LL6. A social enterprise cannot afford not to be profitable. A social enterprise can only play its social role if it is economically profitable and sustainable. And it is an illusion to believe that an NGO can design and run a business. It can create the circumstances that will prompt individuals or groups of individuals to develop and successfully run a business on the long run but an NGO is not qualified and equipped -financially, technically and institutionally- to run an enterprise.

The contribution of the FXB programme to hygiene, healthcare and health-seeking behaviours

LL7. Clarity and consistency in the definition of indicators and the reporting of quantitative data is a condition to the consolidation and the analysis of data. The same reporting methodology and level of rigour must be maintained across progress reports and it is important to always report on progress for the reporting period and progress to date (i.e. cumulative data from the beginning of the project) side by side so that comparisons can be easily made from one reporting period to the next and potential mistakes or inconsistencies easily spotted.

INTRODUCTION

1. The context of the FXB programme

- Elements of the context apply to rural India, including rural areas targeted by the implementing NGO, François-Xavier Bagnoud India Suraksha (FXBIS). The social, economic and institutional context is outlined, along with the related challenges forming the rationale of the intervention. Key features of the context in Tamil Nadu are also highlighted.
- According to the last census data, about 69% of the Indian population live in rural areas (down from 72% in 2001). In spite of a steady and continuous exodus towards urban areas, the rural population continues to grow in absolute terms (83.3 million in 2011 against 74.3 in 2001), owing to the demographic growth. In rural areas, most livelihoods depend upon agriculture, whether one is a farmer or not: those who do not own any land or own too small a piece of land work as labourers for landlords.
- At macro-level, health and education indicators in India are improving. However, access to health care continues to be limited in rural areas. The nearest primary health unit may not be too distant but the cost of transportation often remains prohibitive for the poorest segment of the population. The lack of awareness of health-related issues prevents people from seeking medical assistance as and when they should. Besides, targeted villages in Tamil Nadu are vulnerable to HIV/AIDS due to *“easy access to sex trade in the neighboring towns, a vast network of national highways and a large migrant workforce”* (source: FXBV1 proposal). Children from poor households go to school but have difficulties focusing on their homework and expressing their full potential as the family environment is not conducive to studies (e.g. the mother is often illiterate and there is no space for them to study). Besides, college education is too distant a dream, given its cost.
- Poverty is still striking in many villages because the benefits of the economic growth India has been enjoying over the last two decades have not translated into tangible impact for all rural families. Statistics tend to contradict this assertion: the poverty ratio has declined from 37.5% in 2004/05 to 21.2% in 2010/11 in rural Tamil Nadu (source: Government of India Planning Commission June, 2014, based on the Tendulkar methodology of poverty measurement). Indeed, this is a significant decrease but many rural households are not in a position to benefit from economic growth: more specifically, the capacity of landless rural households to break the vicious circle of poverty remains limited by the lack of job opportunities (even in the agricultural sector), the lack of productive assets, the difficulty for children to pursue higher education, the limited exposure of women to the outside world (they are mostly restricted to domestic chores) and persistent social prejudice underpinned by cast-related factors (FXBV1 and FXBV2 are comprised of landless Dalit communities living in colonies established around the main Mathur village, where farmers reside). These combined constraints are the main reason for continuous rural migration and broken families. Besides, in coastal areas of Tamil Nadu, the resilience of the poorest segments of the population is often tested by natural disasters (tsunami in December 2004, Thane cyclone in December 2011, flash floods in November/December 2015).
- Therefore, lifting the rural poor out of poverty remains a huge challenge for development agencies, whether governmental or non-governmental. While the Indian government, both at central and state levels, does have a higher financial capacity as a result of economic growth, the implementation capacity of its agencies is still low, as evidenced by the many weaknesses of governmental services (e.g. lack of basic infrastructure, lack of technical support): the lucky villages are those where services are provided by NGOs and civil society organizations, sometimes in coordination with and /or supported by governmental agencies.
- Governmental funds are channelled to villages through various mechanisms: 1/ National-level programmes funded by the central government; for instance, the National Rural Employment Guarantee Act (NREGA) is a well-known and one of the largest public works programme in the world: it aims at *“enhancing livelihood security by providing at least one hundred days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work”* (source <http://www.nrega.nic.in/>; all the women met during this evaluation benefit from NREGA. 2/ State-

level programmes: some states are more generous than others but under the reign of « Amma » (Tamil Nadu Chief Minister Jayalalitha, a politician who dominated the local political life for three decades and died on 05/12/2016), Tamil Nadu was prodigal: the State supports many populist schemes, from food distribution to laptops for higher-secondary and college students studying in governmental institutions; supporters say the schemes have benefitted millions of poor people, especially women, while detractors criticize a welfare State that distributed lavishly for political gains, making it challenging for NGOs to extend support to people, while requiring their participation (i.e. since potential beneficiaries are used to receiving assistance free of charge). 3/ Budget allocations to Panchayati Raj Institutions (PRIs are local self-government units) aimed at triggering socio-economic transformation in rural India: however, these funds are almost exclusively spent on infrastructure development (roads, electricity and water), indeed a precondition for socio-economic changes but not a sufficient one.

- Since 1991, the NGO François-Xavier Bagnoud (FXB) has implemented development programmes targeting marginalized and vulnerable people in India. In 2007, FXBIS was established as an autonomous Indian entity. The two projects supported by the Trócaire Foundation (TF) were implemented by FXBIS: FXB Village 1 (FXBV1 - 2010/2012) and FXB Village 2 (FXBV2 - 2013/2015) were both located in Mathur Panchayat (district Villupuram, Tamil Nadu), respectively implemented in Mathur Chinna Colony (MCC) and Mathur Periya Colony (MPC). In addition, FXBV1 was also implemented in Chinna Kalapet (CK), a vulnerable community living in Pondicherry Union Territory (PUT), a few miles away from Mathur village.

2. The intervention logic of the programme

- This part only describes the intervention logic of the two project cycles supported by TF. The section “Evaluation Criteria-Findings” will provide an assessment of the relevance and of the quality of the design.
- A rural development programme is typically comprised of several projects, successive (building on each other) or concomitant (complementary). In this report, “project” refers to a three-year cycle of activities in a specific village (FXBV1 or FXBV2). The term “programme” is used when the analysis refers to the long-term action and presence of FXBIS in Tamil Nadu and/or when it applies to both projects.
- Both projects are based on the “FXB Village model” launched in 1991. This is a three-year community-based approach aimed at eradicating extreme poverty and supporting AIDS-affected communities.
- The intervention logics behind FXBV1 and FXBV2 stem from the FXB Village “generic” logical framework, underpinned by an integrated rural development process comprising seven result/outcome areas: 1/ Strengthen the economic capacities of vulnerable families ; 2/ Better food safety among participants and eradicate children's malnutrition ; 3/ Improve families' access to adequate medical care and prevention ; 4/ Recover psychosocial status of participants ; 5/ Encourage testing of participants and ensure proper management of HIV positive (sic); 6/ Upgrade the living and hygiene conditions of the participants ; 7/ Increase the number of children/teenagers going to school and vocational training.
- There was no dedicated logical framework for FXBV1 and FXBV2. The following tables summarize the intervention logics for each project. They are based on information extracted from the project proposals and progress reports and provide an overview of what the project intended to achieve at the time of design, which strategies were to be developed to achieve the expected outcomes and which indicators were to be measured to assess the achievement of outcomes and impact. These tables do not take into account the adjustments to the design made by FXBIS during the course of intervention but they provide a reference against which the subsequent changes in the design can be assessed.
- FXBV1 targeted 100 families (about 500 direct beneficiaries), split into two locations: 80 families in MCC and 20 families in CK. FXBV2 targeted 48 families in MPC (about 250 direct beneficiaries). MCC and MPC are two Dalit colonies, both are part of Mathur Panchayat and surround the main Mathur village, comprised of about 270 HHs. CK is a vulnerable peri-urban colony in Pondicherry Union Territory (PUT), whereas MCC and MPC are strictly rural areas.
- FXB focuses on families who live in huts. All targeted households were below the international poverty line (USD 1.25/day/person in 2010 -World Bank data- corresponding to about INR 56, based on an average exchange rate USD 45/INR in 2010). By comparison, the Tamil Nadu poverty line in rural areas was lower:

INR 609/capita/month (INR 20/day/person) in 2009/10 and INR 880 in 2011/12 (about INR 30/day/person, source <https://data.gov.in> based on the Tendulkar Methodology of measurement of poverty).

INTERVENTION LOGIC OF FXB VILLAGE 1 (MATHUR CHINNA COLONY & CHINNA KALAPET)

Source: the table is based on information from pages 6,7 & 15 of the Project proposal "FXB-Village Villupuram, India Global Fight against AIDS and Poverty: Development of Sustainable Social and Economic Independence of 80 families through Education, Health and Income Generating Activities", 2009

INTERVENTION LOGIC	SPECIFIC STRATEGIES TO BE DEVELOPED	INDICATORS
OBJECTIVE Help 100 families affected by HIV/AIDS acquire the capacity to meet their basic needs as well as those of orphans and vulnerable children in their care.	The objective is to be reached through the combined impact of the specific strategies aimed at achieving each outcome	<ul style="list-style-type: none"> - # of beneficiaries - Presence of economic profit (Income - Expense > 0)
EXPECTED OUTCOME 1 – INCOME GENERATING ACTIVITIES (IGAs) <ul style="list-style-type: none"> - Increased household income and savings and increased financial literacy - Sustainability of the IGA - Access to micro-credit through Self-Help Groups (SHGs) 	<ul style="list-style-type: none"> - Providing skills and vocational training to participants as well as seed-money for initiating IGAs and facilitating the sustainability of beneficiaries' activities. - Groups activities aimed at allowing beneficiaries to expand their economic activities and ensure continuous basic support - Creation of self-help groups where beneficiaries voluntarily come to pool experiences & contribute to a common fund. 	<ul style="list-style-type: none"> - % of distributed IGA - Average number of IGA per beneficiary - % of beneficiaries above the poverty level - # of collective IGA - # of group bank accounts - % of groups having access to micro-credit schemes
EXPECTED OUTCOME 2 - HEALTH <ul style="list-style-type: none"> - Improved general health of the target population through better knowledge of preventive health measures, hygiene and improved access to healthcare services - Improved access and availability to basic health care including treatment for ARV from Government and local health facilities - Awareness of an adequate level of public health principles, particularly risks and prevention of HIV-AIDS infection 	<ul style="list-style-type: none"> - Covering the target population with free primary healthcare and facilitating treatment (clinical tests and ARV treatment) for HIV-AIDS infected individuals. - Providing psychosocial support to the AIDS-affected families to help them combat the disease and the stress of stigmatization. HIV/AIDS Prevention and Child Protection - Raise awareness on hygiene, basic care, nutrition, reproductive health, STDs, AIDS screening and prevention, sanitation, public health 	<ul style="list-style-type: none"> - % of beneficiaries registered under the national health insurance scheme - % of beneficiary children vaccinated - # of psychosocial individual sessions - # of Voluntary Counselling & Testing - % HIV+ beneficiaries under treatment - # of trainings sessions carried out - # of beneficiaries who attend these sessions - # of beneficiaries using family planning methods - # of distributed condoms - # of peer educators trained
EXPECTED OUTCOME 3 - NUTRITION No cases of malnutrition among the target population and increased knowledge of human nutrition	<ul style="list-style-type: none"> - Providing nutritional support to participating families and to children to improve their health status. 	<ul style="list-style-type: none"> - % of beneficiaries able to cover their daily nutritional needs
EXPECTED OUTCOME 4 - EDUCATION <ul style="list-style-type: none"> - Help children & youth acquire skills and knowledge enabling them to be self-sufficient. - All children are enrolled in school or vocational training programs - Reduced drop-out rate, improved children's performance in school - Functional literacy for women & youth 	<ul style="list-style-type: none"> - Facilitating children's enrolment in primary and secondary schools by providing supplementary educational material, scholarships and coaching. - Providing non-formal education to children and women who do not go to school. 	<ul style="list-style-type: none"> - # of children registered in school - % of regular school attendance - # of teenagers enrolled in a vocational training
EXPECTED OUTCOME 5 - WOMEN EMPOWERMENT Increased participation of women in decision making about their own health and children's health and education	Increasing the awareness of the target population to the basic principles of children's rights, empowerment of women, children and marginalized groups and sustainable community development.	No obvious indicator in the documentation
EXPECTED OUTCOME 6 - COMMUNITY AWARENESS ON HIV AIDS <ul style="list-style-type: none"> - Reduced stigma & discrimination in the general community against those infected by HIV-AIDS. 	Creating solidarity among the members of the community to eliminate stigma and prejudice and facilitate the integration of AIDS-affected families in the general community.	<ul style="list-style-type: none"> - # of collective sessions

- Social integration of AIDS orphans and the affected families in the general community		
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INTERVENTION LOGIC OF FXB VILLAGE 2 (MATHUR PERIYA COLONY)

Source: the objectives and the strategies are based on information from the project proposal related to FXB Village 2 (FXB-Village, Mathur Periya, Villupuram, Tamil Nadu, India) "Transforming poor rural women into successful entrepreneurs", June 2012. Indicators are extracted from the "Project completion Report" (January 2013 –December 2015).

INTERVENTION LOGIC	SPECIFIC STRATEGIES TO BE DEVELOPED	INDICATORS
OBJECTIVE To develop successful and autonomous social entrepreneurs enabling 48 rural women to develop a steady and sustainable economy and help improve overall quality of living of their families.	The objective is to expected to be achieved through the combined impact of the specific strategies aimed at achieving each outcome	
EXPECTED OUTCOME 1 - IGAs Women have become entrepreneurs in three trades poultry, sanitary napkin, and coir rope through skill development and basic financial literacy	<ul style="list-style-type: none"> - Provide skill building, seed capital, marketing linkages and micro credit activities for women, to improve their economic status towards self-sufficiency. - Develop social entrepreneurship complexes benefiting 16 women (poultry farming); 15 women (manufacturing of sanitary napkins) and 20 women (manufacturing of coir rope) - <i>NDLR: numbers do not add up to 48.</i> - Promote SHGs concept and develop sustainable community-based IGAs for 48 vulnerable Indian women from Villupuram. - Create SHGs in each location to encourage beneficiaries to share their experiences, create support networks and manage collective activities. 	<ul style="list-style-type: none"> - # of households with savings - # of households accessing micro-credit/loans - Average household expenditures per month - Average value of assets acquired
EXPECTED OUTCOME 2 - HEALTH <ul style="list-style-type: none"> - Improving recipients' health through regular access to health camps - Understanding of HIV/AIDS and other diseases, and acceptance of disease by infected people and those around them 	<ul style="list-style-type: none"> - Provide medical care by developing health camps for the entire communities. - Inform and train the participants on issues like personal hygiene and disease prevention, in order to fight against diseases caused by bad hygiene and unsafe drinking water. - Build latrines for each one of the 48 households. 	<ul style="list-style-type: none"> - Cases of diarrhea in children under five in the past month - Cases of severe cough in children under five - Households reporting access to health care facilities
EXPECTED OUTCOME 3 - NUTRITION Improved families' well-being through access to good nutrition and safe water.	<ul style="list-style-type: none"> - Provide nutritional support for 48 women and their children (distribution of foodstuffs) - kitchen garden, to grow and consume local vegetables to balance the lack of nutrition - children attending the education centre and the day care centre will be provided with one meal in order to improve their health 	<ul style="list-style-type: none"> - Households reporting consuming three meals daily - Households reporting consuming fruits daily - Active kitchen gardens
EXPECTED OUTCOME 4 - EDUCATION <ul style="list-style-type: none"> - Children who have been on their own for a long period of time return to school. - Children have a good knowledge on life skills. 	<ul style="list-style-type: none"> - School fee and school materials to 100 most deserving families. - A day care centre for small children (aged 3-5) will be set up. - A supplementary education centre is established - Computer training for the benefit of the youth who are deprived of access to computers. 	<ul style="list-style-type: none"> - Average attendance rates for primary & secondary schools - Average grades for primary & secondary schools - # of youth who have completed computer training - # of youth graduating from computer training and pursuing higher education
EXPECTED OUTCOME 5 - WOMEN EMPOWERMENT Involvement of women in households' decision-making (education, health, hygiene) compared to 1 st baseline. Promotion of gender equality and independence for women and girls	Advance social inclusion by promoting positive relationships among men and women, different groups and individuals within communities so that all identify with and belong to a community.	No obvious indicator in the documentation
EXPECTED OUTCOME 6 - COMMUNITY AWARENESS Recipients find respect and dignity and self-esteem again with regard to the entire community.	<ul style="list-style-type: none"> - Provide psychosocial support to help beneficiaries cope with their problems (alcoholism, misery, etc.) the consequences of diseases, displacement or poverty. - Advocacy and awareness activities 	No obvious indicator in the documentation

Decreased stigmatization and discrimination of PLHA.		
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3. Purpose and scope of the ex-post evaluation

- An ex-post evaluation takes place after several months have passed since the end of a development intervention and its aim is to examine whether and how the benefits are continuing. This ex-post evaluation focuses on the second project (FXBV2), a year after the end of the support by TF (December 2015). It is also aimed at drawing lessons from the experience of FXBV1, four years after its completion (December 2012). Except for the peri-urban enclave of CK in PUT, both target villages (MCC and MPC) belong to the same panchayat and the context is similar. Opportunities for assessing the sustainability of the benefits four years after the end of a project are rare: typically, the implementing partner is no longer in place, beneficiaries have dispersed or are hard to identify; or too many NGOs operated at the same time in the same location and beneficiaries cannot remember who did what. In this case, FXBIS is the main NGO working in Mathur Panchayat, it still has a strong presence in the field and the team continues meeting the beneficiaries from MCC and MPC on a regular basis, not only because both villages are located near the FXBIS office in Villupuram district (refer to the snapshot of the project area) but also because the collective enterprises developed under FXBV2 are located in the premises of FXBIS. This did facilitate the evaluation.
- As per the Terms of Reference (ToRs) provided by TF (in italic hereafter), the evaluation is *“to analyse and assess the relevance, sustainability, impact and effectiveness of the strategies, project design, implementation methodologies and resource allocations that have been adopted for the purpose of achieving the objectives stated in the project documents.”*

The general objectives of the evaluation are as follows:

- *To identify and evaluate the effectiveness and outcome of strategies and activities of the project, and the delivery of project outputs.*
- *To review and evaluate the extent to which project impacts have reached the beneficiaries.*
- *To evaluate the sustainability of the proposed cooperative model over time (with a specific focus on the first FXB Village program supported from 2009 to 2012).*

More specifically, the objectives are:

- *To evaluate the evolution of existing self-helps groups created / reactivated to encourage women to manage collective activities, and assess their impact, and sustainability.*
- *To assess the skill building, seed capital, marketing linkages and microcredit activities provided to women, in light of the objective to improve their economic status towards self-sufficiency, and their sustainability.*
- *To assess what has been the changes in the number of individuals/families with improved access to nutrition, medical care, latrines and the change in perception of beneficiaries regarding personal hygiene and disease prevention.*
- *To identify the number children with better access to quality education, assess the relevance of the proposed tools, and evaluate the impact of the project on those children.*

In parallel, the evaluation is expected:

- *To identify and evaluate the constraints and problems, having been or being encountered.*
- *To assess the barrier removal interventions identified/developed/recommended to ensure long-term sustainability of project-initiated activities (with a specific focus on the cooperative model) beyond the project life.*
- *To assess the level of public involvement in the project and recommend on whether public involvement has been appropriate to the goals of the project.*

In pursuit of the above, the following key issues should be carefully looked at:

- *Changes in the social inclusion such as promoting positive relationships among men and women, different groups and individuals within communities so that all identify with and belong to a community.*
- *Changes in the enabling environment such as policy changes, increasing stakeholder involvement.*

The ToRs also stipulate:

Insofar as possible, this exercise may bring elements that can feed FXB's current internal strategic reflection around its development in India and abroad. This shall however be seen only as an opportunistic outcome of the evaluation and not as one its fundamental objectives. Eventually, the evaluation will also

identify/document lessons learned and make recommendations that might improve design and implementation of other similar projects.

4. Approach and methodology

- The methodology of the ex-post evaluation follows a traditional evaluation approach with a strong focus on design, impact and sustainability. The evaluation of the impact of a project is underpinned by the analysis of its contribution to the achievements of the overall (higher level) objectives of the action, while sustainability is what remains when financial and logistical support has ended, i.e. the continuation of the flow of benefits from a past intervention. The evaluation also focuses on the likelihood that benefits will further continue, by identifying the risks that may halt the flow of benefits and the factors of resilience to these risks. Efficiency is not a focus of an-post evaluation but circumstances that hampered or boosted the implementation of the project and contributed to its success are nevertheless highlighted. The qualitative aspects of impact have been carefully reviewed: they are key to understanding the changes in attitude and behaviour at individual, family and community level, which are a precondition to the sustainability of the benefits. Sustainability is assessed from various angles: the institutional and human capacities of the key stakeholders -including that of FXBIS- to ensure a continuation of the flow of benefits; the affordability of the benefits for target groups on the long term; the performance and the long-term viability of the collective Income Generating Activities (IGAs); the involvement of the private sector in ensuring the sustainability of the action; whether and how the role of women has been enhanced and gender balance promoted. The relevance and the design were also assessed retrospectively as the overall quality of an intervention is an intrinsic factor of impact and sustainability, with useful lessons to be drawn for the design of future interventions.
- The evaluation did not use questionnaires, which lack the flexibility required to understand the transformational changes that an evaluation wants to capture. Beneficiaries were encouraged to share their views and stories, with a focus on the changes in their lives since the project started and until recently: further discussions with stakeholders and the project staff helped determine whether the programme alone could take credit for the changes. This type of interviews entails that sufficient time is available to interact with people. The methodology behind this open and flexible dialogue between the evaluator and the beneficiaries is based on the Most Significant Change (MSC) technique, underpinned by the concept of participatory evaluation. The MSC technique is complex and cannot be fully applied during an evaluation owing to time constraints but its spirit can guide the field phase of an evaluation. Overall, the evaluation strives to provide a dynamic view of a changing community: where it started from, where it is now, where it is heading to.
- The evaluation was underpinned by a field phase of 15 days and supported by a desk review (prior and during the field phase) of various documents (proposals, annual progress reports, surveys, internship reports, training material, monthly attendance logs for collective IGAs). Prior to the field phase, a briefing session was organized in New Delhi with the CEO and the Head of Monitoring and Evaluation of FXBIS. The latter was also present in the field for the first two days of the evaluation.
- The schedule of meetings was established with a view to 1/ to review the outcomes from the full range of activities, whatever their performance, i.e. positive or negative; 2/ to meet with a wide spectrum of stakeholders and beneficiaries; 3/ sufficient time for each meeting, with a clear preference for quality (in-depth interviews) over quantity (number of interviews).
- The evaluator met with a total of 92 beneficiaries: 65 women (including 12 students) and 27 men (including 11 students). The breakdown per project is 58 beneficiaries for FXBV2 and 34 for FXBV1. In addition, 11 stakeholders were interviewed, most of them relevant to both projects, with a view to assess the value of their interaction with FXBIS and the beneficiaries, as well as to draw from their experience of the programme. Government stakeholders could not be met: the schedule was complicated by official mourning after the death of the Chief Minister of Tamil Nadu. Several in-depth meetings were held with the project staff. By the end of the field phase, after taking stock of the preliminary outcomes of the evaluation, a meeting was held with the project staff to gather their stories and assessment of the intervention: structured and facilitated by the evaluator, this exercise contributed to the “participatory evaluation”, in line with the MSC technique. As the CEO of FXBIS was unable to join the debriefing session

in Tamil Nadu due to weather conditions, an extensive debriefing session was conducted over skype with the CEO and the Head of M&E on the last day of the mission.

EVALUATION CRITERIA (FINDINGS)

1. Relevance of the overall FXB programme and quality of the design of FXBV2

- **Relevance-related criteria.** The choice of the target groups, the analysis of the needs and most importantly the adjustments made in the design in response to changes in the context and/or in the needs of the beneficiaries determine the relevance of the intervention, which revolves around 3 main components (IGAs, health and education), and the overall quality of the design.
- **The choice of the target groups.** FXB has been present in Tamil Nadu since 2003. Its initial objective was to assist People Living with HIV AIDS (PLHAs) and create better awareness of AIDS-related risks (this was also the main thrust of FXB in other countries). The area of intervention in Tamil Nadu was selected because it was deemed at risk. While the first proposal (FXBV1) was focused on PLHAs and people at risk of contracting HIV AIDS (refer to the intervention logic table for FXBV1), it turned out that no PLHAs lived in MCC and the focus on poverty quickly took over the focus on HIV AIDS. In CK, 5 PLHAs were identified and provided support. With the implementation of FXBV1 came the realization that HIV AIDS was not as widespread as thought in the targeted area but acute poverty of marginalized communities was nevertheless an issue, that the root causes of poverty needed to be addressed from a socio-economic viewpoint, while HIV AIDS could be addressed from an awareness standpoint (i.e. not as the root cause of poverty). Therefore, the design of FXBV2 no longer focused on PLHAs but on underprivileged, landless families dominated by upper cast landlords and collective IGAs were introduced in a systematic way to offer economic opportunities.
- **The relevance of the FXB component to income-related issues.** The timing of the FXB programme is very opportune. The targeted communities need help to overcome contextual challenges. The main difficulty stems from the lack of job opportunities locally. It is beyond the scope of this evaluation to analyse the local labour market but the following facts confirm the high relevance of the programme, especially of its IGA component. The labour market in the area has strongly evolved over the last 15 years. Among the factors of change is the fast rate of urbanisation and the requirement for construction workers, also in huge demand in the Gulf countries: in Villupuram district, the daily average agricultural wage is about INR 250, but in nearby Pondicherry construction workers routinely get INR 400/day and up to INR 800/day for masonry work. Therefore, many men migrate to urban areas so they can support their village-based families. Others work at a nearby pharmaceutical company. In short, if they can, men tend to avoid agricultural labour, hard and insufficiently remunerative: for instance, several youths who benefitted from vocational training under FXBV1 have left for better employment (e.g. in the hospitality industry) in urban areas; and two youths who benefitted from an IGA ("mini-truck") introduced by the programme in MCC are now masons. However, women are not as mobile as men, they cannot easily step out of the village but one salary is not enough to sustain the HouseHold (HH) and they too are looking for a job. For them, NREGA is often the answer. This is another factor of change in the labour market: by guaranteeing one hundred days of unskilled labour (per year) to every adult from rural HHs, the national rural labour scheme known as NREGA (rolled out from 2006 to all rural areas of India) certainly has had the potential to disrupt the agricultural labour market. NREGA-related work is typically less difficult than agricultural work and days are shorter than wage labour days, which attracts women, in spite of low wages (about INR 130/day). As the labour force has turned away from agricultural work, farmers (landlords) have shifted from annual food crops (rice, cashew) to perennial cash crops (casuarina trees): casuarina trees make quality soft construction materials and are in high demand; harvested every three years, they require limited maintenance compared to labour-intensive rice cultivation; besides, in the context of climate change, the cultivation of casuarina trees is also an advantage as it is less vulnerable than food crops to excess/shortage of water. In a vicious circle, the shift to perennial crops forces landless agricultural labourers (the target population of the FXB programme) to further rely on NREGA, which is simply not enough as a means of subsistence. Therefore, the introduction of IGAs by FXBIS was very relevant and very well received by the communities. Let us note that NREGA is all Indian States but not in Pondicherry (a Union Territory) and

therefore not available in CK.

- **The role of women in the FXB programme.** This explains why the best response to IGAs introduced under FXBV1 (not specifically designed for women) came from women: IGAs were a welcome alternative to NREGA and provided full-time occupation. Building on the lessons of FXBV1, collective IGAs under FXBV2 were designed for women: *“The core of this program intends to promote the entrepreneurial capacity of Indian vulnerable women by creating micro-enterprises that will be owned, run and managed by them, and will also enable them to progressively earn incomes and provide for their own needs and those of their children.”* (source: page 9 of the proposal for FXBV2). Today 7 women work together to manufacture coir rope and 9 women make sanitary napkins. However, the poultry group is not comprised of women -as per the initial planning- but of 10 men. Because poultry farming is not a labour-intensive activity and requires limited manual work, the men in MPC quickly showed an interest and saw it as a complementary activity (all of them are either employed, self-employed or are studying). Compulsory night duties in the poultry barns (no women allowed) further contributed to shifting the ownership of the enterprise away from women early in the implementation of the collective activity: it is the men who received the training, and they further trained the women for the more labour-intensive tasks (litter, vaccination, washing the feeders and the shed). Three women are currently helping (a few days per batch) but the ownership of this collective IGA is with men. This situation is not negative (the unit is profitable and benefits 10 HHs), but is nevertheless a missed opportunity in terms of women empowerment.

⇒ **LESSON LEARNED (LL1).** The decision that men -rather than women- would run the poultry unit was made by the beneficiaries, not by FXBIS. Therefore, there is no point in recommending a change in a situation where the ownership of the activity is established. However, there are lessons to be learned for future interventions: does poultry farming lack relevance as a collective IGA for females in the rural context of Villupuram? When unplanned dynamics emerge from development processes, the NGO cannot directly interfere (or else it may negatively influence ownership processes) but it needs to take stock of the situation and adapt its strategy, unless these dynamics are considered fully positive. In the case of the poultry group, is it an issue that men -not women- are in charge? The fact that men consider poultry farming as a viable investment is a positive aspect. But is the poultry unit run by men as profitable as it would/could have been if it was fully run by women? This evaluation cannot conclude but the question is worth asking because men run the poultry unit as a side activity, whereas women would have had more time to dedicate to the management: and the point is precisely that the management of the poultry unit is not optimal (refer to the section “Performances and Sustainability of the Collective IGAs”). The income from the poultry unit benefits 10 HHs (a positive aspect) but would women ownership have led to a different use of the money? Again, it is difficult to conclude but women involved in collective IGAs tend to save the money they earn (through Self-Help Groups or other savings mechanisms), whereas there is no evidence of such savings mechanisms with men.

- **The relevance of the FXB programme to education issues.** Education is a domain where the government has a strong presence in the target area: there is a primary school in the main Mathur Village and a secondary school, across the FXBIS office, in Kazuperumpakkam, both free and opened to all children. Therefore, access to primary and secondary education was never an issue per se, except for tiring distances: for instance, the secondary school is about 4 km away from MPC because children must follow the road and there is no way to cut across the casuarina fields. But the key issues at stake were how to elevate and sustain the performances of children from vulnerable families and how to make sure they pursue the complete academic cycle. Indeed, targeted Dalit communities were at a strong disadvantage regarding the education of their children: parents are either illiterate or have limited education (they cannot help their children), the children find it difficult to concentrate on their studies when they live in huts (limited space, no light, too much distraction); besides college education is too costly, i.e. not within the reach of the families. However, interviews with parents during this evaluation confirm they have all high expectations for their children: their single most important objective is to invest into children education, and by that they mean college education, i.e. beyond the XIIth grade. They have a clear understanding that education is the single most important factor of long-term socio-economic change because lifting a child from poverty through higher education has the potential to lift the entire family out

of poverty (under the joint family culture, an elder child with a decent job will contribute to the education of his/her younger brothers/sisters and will contribute his/her income to the well-being of the entire family). To this end, the integrated design of the FXB programme was highly relevant: the education component addressed the needs of the poor families (transporting the children to school, coaching them after class hours, helping with supplies they cannot afford) and therefore complemented the governmental action; the IGA component was designed to increase incomes and therefore carried the potential to contribute to savings, which could be used for children education. As for health, it is the single most important factor of vulnerability as it underpins every productive activity, be it studying (children) or working (parents). Therefore, no integrated rural development intervention can be complete without a well-designed strategy to address health-related issues: by focusing on complementary areas of intervention such as sanitation, nutrition, hygiene and diseases, the FXB programme was designed to improve and maintain the health of children and parents, a precondition to improved socio-economic conditions for the family and quality learning for the children on the long term. Besides, activities related to health, hygiene and education were extended to the whole Mathur village (not just the colonies) and neighbouring villages, which did increase the overall relevance of the intervention.

- **The capacity of FXBIS versus the needs of the action.** From the description of the context, it is clear that the needs are huge and rural development interventions are very challenging. Therefore, the first and most difficult decision for an NGO is to choose a challenge commensurate to its own capacity, in its own interest and that of the targeted communities. The adequacy between the action and the institutional, human and financial capacity of the implementing agency is a key factor of relevance. In the case of the FXB programme, the action is ambitious, as evidenced by the intervention logic: the implementation required solid managerial capacities and communication skills, along with a strong presence in the field; besides the length of each project cycle was only three years, which entailed a sustained pace of implementation. On the other side, FXBIS is a young institution (even though FXB has been in Tamil Nadu since 2003) and has been slowly building its capacity in Tamil Nadu: it started with two full time staff under FXBV1, then two more staff were added under FXBV2. The implementation capacity is also influenced by the general pace of work, hampered by festivals, holidays, the rainy seasons, erratic electricity supply and poor internet connection (etc.), i.e. a recipe for delays in implementation and other efficiency-related issues. Fortunately, the FXB model is ambitious by design but modest by scale. Therefore, potential implementation issues were compensated by the size of the target groups (100 HHs under FXBV1 and 48 HHs under FXBV2), small enough to allow for meaningful interactions between the project staff and every family and for every HH to play a part in the project. Besides, all targeted HHs were part of the same communities and living in the same village (except for 20 HHs in CK under FXBV1): anything bigger or more geographically dispersed would not have been manageable by the project team. The small-scale intervention and the focus on one village at a time has helped mitigate efficiency issues and allowed for a special bond between the project and the local communities.

- **More on the scale of intervention of FXBV2.** Even though the capacity of the project team increased after FXBV1, the target group was smaller under FXBV2. The choice of a smaller target group for FXBV2 proved right. Indeed, under FXBV2 a strategic challenge was added to the programme, i.e. the design was underpinned by the development of collective Income Generating Activities (IGAs were hardly present under FXBV1), which required a different -more intense and time-consuming- managerial and operational approach. Besides, the project intended to cover all targeted 48 families with 3 collective IGAs (3 groups of 15 to 20 beneficiary women each were to be involved in poultry farming, in manufacturing of sanitary napkins and in manufacturing of coir rope). However, the design of the collective IGAs proved too ambitious. For instance, the project was planning 8 poultry farms in Villupuram with a capacity of 500 chickens per batch, each farm run by two women. In reality, only one poultry farm was constructed, run by 10 individuals. As it turned out, each collective IGA can only support about 9 to 10 individuals, therefore 28 people are involved in the three collective IGAs and FXBIS had to adapt its design and devise solutions to respond to the needs of the other families of MPC (about 20 HHs), which could not be involved in collective IGAs. In this context, a larger target group would have stretched the capacity of the field team.

- **The length of the project cycle.** The FXB Village model is characterized by a short cycle (3 years). Integrated rural development interventions are usually longer, the minimum number of years needed for

sustainable impact to emerge being about five. However, the benefits observed during the evaluation are an evidence that the short cycle of FXBIS is viable. The effectiveness of the model stems from the fact that IGAs are developed early in the life of the project. This is explained in the project proposal of FXBV1 (page 6): *“The objective of the FXB-Village is to work efficiently, with a light structure, with approximately 80 poor families... Its cost decreases over the years since the training and basic material for the IGA are provided at the beginning of the program and the families start generating revenues gradually.”* By comparison, many development interventions spend their first year in induction-related activities. When the project ends, the implementing agency complains that little time was left to properly implement core activities and strengthen the benefits. Indeed, the difficulty of such integrated operations is to strike a balance between duration, impact and sustainability. The FXB model promotes a “short duration cum high impact” approach. And this evaluation did not find any evidence that the sustainability of the benefits was undermined by the short duration of the project except for key education-related activities such as evening coaching classes, which -de facto- were maintained by FXBIS after the end of the project until another NGO (“A way with you”) took over. This is not to say that all benefits are sustainable, but most sustainability issues are not linked to the project duration.

- **Adjustment in the design of FXBV2 based on the learnings from FXBV1.** FXBV2 builds on the FXB Village model, adjusted to the local context (i.e. focus on poverty, not on HIV AIDS). It incorporates well designed elements, in tune with the local cultural dimension and the needs of the beneficiaries, e.g. activities related to education, health and sanitation. FXBV2 also builds on the experience of FXBV1, as well as on the programme of FXBIS in Andhra Pradesh, which promotes collective IGAs. The learning curve of FXBIS in Villupuram district is quite apparent in the key differences between the designs of FXBV1 & FXBV2: 1/ a change in the nature of the targets groups, with a focus on marginalized women under FXBV2, as opposed to marginalized people vulnerable to HIV AIDS under FXBV1; 2/ a change in the strategic approach, FXBV2 being underpinned by a collective approach to IGAs (poultry, coir, sanitary napkins) instead on individual IGAs under FXBV1 (e.g. cattle, tailoring, ironing); 3/ the complexity of the collective approach was compensated by a reduction in the scale of the intervention (48 HHs for FXBV2 against 100 HHs for FXBV1). 4/ Other features of the design have also evolved: under FXBV1, general purpose health day-camps were organized on a monthly basis, while specialty health camps were the focus under FXBV2; and now, a new project in Villupuram district focuses on weekly evening clinics in Nesal, the new FXB Village (FXBV3), so that women and children may come after a day of work/class.

- **Adjustment in the design of FXBV2 during the implementation.** In response to the context and the needs of the beneficiaries, many additional adjustments were made during the course of implementation with a view to increase the relevance of the intervention and/or to maximize its impact, which suggests FXBIS was reactive to the evolution of the context and flexible about the needs of the beneficiaries. For instance, the addition of a school van to transport children from their homes to the education centre was a relevant addition to the original design. On the negative side, some activities lacked relevance -judging by the fact that no beneficiary ever spontaneously mentioned any benefit from the activity during the interviews- but were maintained with limited success: for instance, kitchen gardens in small backyards, a feature of both FXBV1 and FXBV2; while the concept may be relevant from a nutritional standpoint, the implementation modalities were not well thought of and partly explain the lack of sustainability.

⇒ **LESSON LEARNED (LL2).** Kitchen gardens for marginalized people who have a few square feet of land around their house can be a valuable nutritional concept provided the constraints are fully identified and the activity is well designed, takes into account all the constraints (e.g. the fact that the target groups are landless people, with limited experience in crop cultivation, the absence of fencing) and is well executed (i.e. not limited to the distribution of vegetable seeds). The relevance of an activity is as much about its content as it is about the modalities of its implementation, i.e. a valuable but poorly implemented idea becomes irrelevant.

- **About the “cooperative model”.** The ToRs of this evaluation stipulated that one of the general objectives was to *“evaluate the sustainability of the proposed cooperative model over time, with a specific focus on the first FXB Village program supported from 2009 to 2012.”* As clearly explained by the project team, FXBV1 was mostly focused on developing individual IGAs. The collective concept was introduced under FXBV1 but it was not the prominent strategy and the majority of the beneficiaries under FXBV1 (83

out of 113 beneficiary HHs in MCC and CK) were involved in individual IGAs. The concept of Sanitary Napkin Unit (SNU) was not included in the proposal for FXBV1. It only emerged in 2011 and two units were developed (one in MCC, one in CK) with funds from the Fondation ELLE. In addition, a few beneficiaries were encouraged to form groups and engage into collective activities: e.g. in MCC two groups (of 3 women each) started making coir rope with coconut fibre and a group of young men was involved in a mini-truck operation. These are indeed collective activities, but they have nothing to do with a “cooperative” model. The lack of details and clarity in the reporting may have fostered the confusion around the cooperative concept: for instance, page 13 of the last/final progress report for FXBV1: *“The social enterprise (collective IGA) such as coir rope making has built good cooperative (sic) in the society and has a reputed market locally”*. However, as observed during the evaluation, the coir “social enterprise” developed under FXBV1 is a loose arrangement between 3 women making a living from jointly operating a manual coir rope making machine: it does not diminish the value of the IGA for the women but it has nothing to do with a cooperative structure and it can hardly be called a “social enterprise”, as it has no institutional existence. Similarly, the model developed under FXBV2 is also a simple collective model, not a cooperative one. The collective strategy was the thrust of FXBV2 but the model remains basic, underpinned by the concept of Common Livelihood Group (CLG), which refers to a small group of individuals engaged in collective production and marketing. The proposal for FXBV2 (page 9) however refers to the cooperative model developed by FXBIS in Andhra Pradesh, where a cooperative society had been registered with a view to provide “an appropriate legal and institutional frame work for social entrepreneurship units”, further adding that “the same process is underway in Villupuram”. FXBIS later realized that its initial plan to develop a cooperative model in Villupuram was not realistic (huge administrative constraints, not compatible with the scale and duration of the intervention). Unfortunately, this was not never explained in the progress reports: the concept of CLG is mentioned for the first time in the reporting in 2014 but the reasons why the cooperative model was not pursued are not documented.

- **Reporting-related issues.** Similarly, the reports never highlighted the fact that a group of men (and not women) was in charge of the poultry unit. Other elements of the design evolved during the course of the intervention, without much explanation (e.g. under FXBV1, a doctor was supposed to be hired under the health component but medical camps were held, instead). The changes in the design are not the issue: indeed, the project team did take stock of external circumstances and preliminary results and adjusted the design accordingly throughout the life of the project, a sign of reactive and responsible management. The issue is the lack of documented explanation in the reporting about the changes in the design. This is not a good practice and it is detrimental to the clarity of the design and to the understanding of the evolution of the FXB programme by external observers, including TF. More generally speaking, there is a lack of analysis (at least in writing) on the changes in the context and how they affect the design and the effectiveness of the activities: for instance, the issues related to the performance and the sustainability of the production of sanitary napkins (one of the three collective IGAs developed under FXBV2) should have been specifically discussed in the final report to TF. The progress reports were aimed at demonstrating progress but were too descriptive and failed to acknowledge and analyse the nature and the magnitude of the challenges (except for the sanitation programme).

⇒ **RECOMMENDATION (R1).** There is no development without challenges and FXBIS should not refrain from highlighting challenges in a more obvious and analytical manner in its reporting. A good practice when reporting on progress consists in going back to the original proposal and compare the actual design with the original design. Each report should reflect the essence of internal strategic debates (i.e. at FXBIS management level) on the challenges attached to the ongoing implementation of the programme. For instance, there was a clear contradiction between the concept FXBIS intended to introduce in Tamil Nadu (a cooperative scheme) and the scale of FXBV2 (48 HHs were covered, whereas the membership of a cooperative is typically huge, at least 1000 members). The issue is further highlighted by the realization that activities were designed for a larger number of people (as per the proposal) but this did not prove sustainable, i.e. a lesser number of women/men was eventually involved in collective IGAs. This should have been highlighted in the reporting.

- **Conclusion.** The focus on poverty and women entrepreneurship made the project (FXBV2) highly relevant to the issues of the Dalit population of the Mathur village. Besides, the different components of

this integrated project were designed to complement each other and maximize the impact on children education, the strongest factor of long-term socio-economic empowerment for landless rural families. The small scale of intervention was well adjusted to the capacity of the organization and certainly a factor of efficiency and effectiveness. The experience acquired during the successive projects has increased the design capacity of FXBIS. The design of FXBV2 was built on the lessons of FXBV1. Besides, many adjustments were made to the design during the implementation of the project in response to changes in the context and the evolving needs of the beneficiaries. Most of these adjustments were appropriate but, on the negative side, not properly documented in the reporting to TF, which should have better reflected the complexity of the project and the many challenges posed by its implementation. For its third on-going project in Villupuram (FXBV3) funded a Swiss NGO, FXBIS has prepared a logframe, a project feature generally well-received by prospective donors.

2. The role of the IGAs on the income and the livelihoods of the beneficiaries

- Introduction.** The objective of FXBV2 is *“to develop successful and autonomous social entrepreneurs enabling 48 rural women to develop a steady and sustainable economy and help improve overall quality of living of their families”*. As explained under design, the intervention logic of FXBV2 revolves around three major components: IGAs, Health and Education. This section focuses on the overall impact of the IGAs on the living conditions of the beneficiaries: it highlights the socio-economic benefits of the IGAs but the specific background, the actual performances and the sustainability of the different collective IGAs promoted under FXBV2 are presented and analysed in the next section *“Performances & Sustainability of the Collective Income Generating Activities”*. The specific impact and sustainability of the health and education components are also discussed in separate sections. During the evaluation, the benefits of FXBV1 were also reviewed and several references are made to FXBV1, as and when it contributes to the analysis.
- Background.** FXBV1 mostly focused on individuals IGAs, FXBV2 on collective IGAs. Under FXBV1, FXBIS introduced a variety of individuals IGAs based on the capacity of the beneficiaries and the local market conditions (e.g. milch cows, masonry implements, sewing machine, eatery, petty shop, iron stand, fish vending, plastic utensils vending etc.). Manual coir rope making was also introduced as a semi-collective IGA (e.g. 2 groups of 3 women each in MCC) and a SNU -started in November 2011 with funds from the Fondation ELLE- later employed 9 women in MCC. Milch cows were the most popular IGA: 22 of them were distributed. The financial contribution of FXBIS ranged from INR 5,000 (sewing machine) to INR 15,000 (milch cow). Besides, every HH contributed in cash to the individual IGA, about 20% of the total cost. Under FXBV2, two collectives IGAs were developed on the FXB campus (a piece of land FXBIS purchased in Villupuram in 2013): automatic coir rope making and poultry breeding, respectively occupying 9 and 10 individuals. In addition, the SNU started in MCC was closed after the end of FXBV1 and reopened under FXBV2 with a different group of 9 women from MPC. Other women living in MPC, but not involved in a collective activity, were given the opportunity to develop individual or semi-collective IGAs (e.g. 3 women run an eatery from the FXB campus, several are into thatch weaving, a home-based activity).
- Comparison of incomes from collective and individual IGAs.** Whether individual or collective, the impact of an IGA on the individual income has been positive. It is difficult to compare incomes from different activities because 1/ some activities (e.g. milk or poultry production) do not follow a monthly rhythm (chicken are raised in batches of about 40 days while milk production stretches over a period of 6 months) and 2/ there is a potential bias in the reporting of income from individual IGAs (e.g. people know their daily income but may not fully appreciate the average number of days of work per month). Nevertheless, the following table attempts to provide a comparison of monthly individual incomes based on estimated annual income for collective IGAs and information on daily and monthly incomes provided directly by beneficiaries for individual IGAs. Patterns emerge. The monthly individual income tends to be higher for individual IGAs (ranging from INR 1,084 for milk production -this includes the savings realized by not having to buy milk from the shop for the needs of the family- to INR 3,600 for fish vending) than for collective IGAs (ranging from INR 850 for a woman working in the SNU to INR 1,347 for a member of the poultry group). This confirms former observations made by FXBIS at the end of FXBV1: an annex to the final progress report provides the average monthly income attached to each IGA, which is higher for most individual IGAs (except for milk production) than the average income from collective IGAs. Besides, there is

a clear connection between the number of productive assets and the income: for instance -and very logically- the annual income from two cows (a woman earns INR 28,800, after expenses) is twice the income from one cow (a man earns INR 13,000 after expenses); one woman who operates a small iron stand at the Pondicherry University earns about INR 3,000/month and has managed to buy a second iron stand operated by her son, who thus further contributes to the family income with another INR 3,000/month (not mentioned in the table below).

ESTIMATED MONTHLY INDIVIDUAL INCOMES FROM INDIVIDUAL AND COLLECTIVE IGAs

NATURE OF THE INCOME GENERATING ACTIVITY	ACTIVITY	ESTIMATED ANNUAL INCOME/PERSON 2016 (INR)	ESTIMATED MONTHLY INCOME/PERSON 2016 (INR)
COLLECTIVE IGAs*	Coir making unit in MPC (automatic)	15,875	1,323
	Poultry unit (4 batches) in MPC	16,163	1,347
	Sanitary napkin unit in MPC	10,197	850
INDIVIDUAL IGAs**	Eatery in MPC (2 women)	-	2,700
	Coir rope making in MCC (manual – 3 women)	-	2,520
	Beautician in MCC	22,500	1,875
	Milk production (one cow) in MCC	13,000	1,084
	Milk production (two cows) in MCC	28,800	2,400
	Tailoring in MCC	-	2,700
	Plastic utensils vending in CK	-	2,400
	Petty shop in CK	-	2,250
	Iron stand in CK	-	3,000
	Tailoring in CK	-	2,250
	Fish vending in CK	-	3,600

(*) For collective IGAs, estimated annual/monthly income based on data and calculations (see the next section for details)

(**) For individual IGAs, estimated monthly/income based on information provided by beneficiaries during interviews

- **The value of collective IGAs versus individual IGAs.** According to the project staff, the concept of collective IGAs came from FXBIS. It was not a request from the people who –says the staff- were keen to develop individual activities. But now that people are involved in collective activities, they say they enjoy it: both the coir group and the SNU group claim they enjoy working together. Obviously, the analysis of the effectiveness of collective IGAs should look beyond monetary benefits. Indeed, a collective activity has a deep intrinsic value: individuals involved in a collective IGA are able to forge strong social links with each other. As a result, empowerment processes are typically faster and more effective when underpinned by a collective approach (as opposed to an individual one). Hence the role of collective IGAs in the second and third projects of the FXB programme in Villupuram (FXBV3 is also based on a collective approach). Another benefit of the collective IGA is the creation of precious productive assets for the target group: for instance, the poultry group would never have been able to acquire the land needed to install the poultry shed (agricultural land prices are prohibitive, around € 10/m²), similarly the women of the coir group would not have been able to invest in two automatic rope making machines (INR 150,000 each). Besides the contribution of the NGO makes the productive asset immediately profitable (otherwise the return on investment for a poultry farm of this dimension is about five years, according to the local supplier). Last but not least, collective IGAs allow for beneficiaries to get involved in an occupation, which cannot be undertaken on an individual basis (automatic coir rope making, poultry breeding, manufacturing of sanitary napkins), therefore they broaden the scope of occupations, which can be developed in a rural context.

⇒ **LESSON LEARNED (LL3).** While collective IGAs are associated with many intangible benefits, there is no evidence that they offer -in the context of the FXB programme- superior economic benefits, as compared to individual IGAs, which tend to generate higher monthly individual incomes. Besides, individual IGAs may offer the opportunity to further increase productive assets (e.g. a female cow may give birth to another female cow), while the increase in productive assets is more complicated in a collective context, because 1/ the collective assets are generally quite expensive (e.g. the investment for the poultry unit is in the range of INR 200,000, to be compared with a pregnant female cow whose cost is about INR 25,000 or a sewing machine, about INR 10,000 to 15,000); 2/ it requires a proper institutional capacity, which the CLGs currently do not have (this is developed in the next sections).

- **Supplementary income.** The income generated by collective and individual activities introduced by FXBIS is rarely sufficient to sustain an entire HH. It is a valuable contribution the HH income but it typically supplements the husband's income (if the IGA is run by a woman) or acts as a side-activity (if the IGA is run

by a man). But there are exceptions to the rule. In Chinna Kalapet, many women interviewed for this evaluation are widows. In most cases, husbands have died of alcoholism (the local plague) or natural disasters (tsunami, Thane cyclone). Therefore, the introduction of IGAs by FXBIS has indeed been instrumental for these women: they are the main breadwinner of the HH, the IGA supported by FXBIS is their main occupation and source of income. But even for widows, the IGA-related income is not sufficient and is completed by a pension (INR 1500/month under the national “widow pension scheme”). Besides, these women-headed families also tend to multiply the sources of income: one widow supported by FXBIS to establish an iron stand later bought a second iron stand, which is now operated by her son who lives under the same roof; another widow who benefitted from a sewing machine lets her daughter take the tailoring orders while she works as a cleaner outside her home, and when she comes home in the evening, she also takes tailoring orders; another woman (in MCC) is the head of the family, a beautician and she also works for the local government, monitoring the SHGs in Mathur village on behalf of the block development office. These woman-headed families may not be above the poverty line (currently at USD 1.90/day/person, source World Bank) but without the IGA introduced by FXBIS, they would be today in a dire situation of emergency.

⇒ **RECOMMENDATION (R2).** A beneficiary of FXBV1 (in CK) is a widow (her husband died 10 years ago). However, she claims she never received her widow pension, saying there was much administrative confusion around her case, possibly corruption. FXBIS was not aware of it until the subject was brought up during the evaluation. This woman lives with HIV AIDS: this is a human rights issue that requires the attention of FXBIS.

- **The impact on livelihoods and living conditions of the beneficiaries.** The impact stemming from the rise in income is positive for most beneficiary family, as evidenced by the representative selection of answers to the following question: “what have been the most important changes in your life over the past few years?”. Here is what people answered: we now have a permanent job; we were able to reimburse our debts and free the HH from money lenders; the additional income was used to pay for college fees for a child or a sister, or for the vocational education of a teenager, or for the coaching classes of children after school hours (in CK, coaching classes supported by FXBIS stopped after the end of FXBV1); we are saving money to pay for children’s college so that we do not have to borrow money; a woman saved enough money to complement a loan from her SHG to construct a proper house; productive assets were bought (a motorbike, a cow, centring tools for masonry, a beautician kit); we no longer depend on NREGA; the extra income contributed to marriage fees (dowry); a man was able to open a shop for his wife; we can afford to buy vegetables from the market; we can pay for emergency hospital fees; the family is more comfortable. Obviously one could argue that the FXB programme may not be credited for all the positive changes. However, interviews with several stakeholders (e.g. the president of the panchayat, the headmistress of the Mathur primary school, the assistant village administration officer) confirm the key role FXBIS played in improving the economic condition of the Dalit population of both MCC and MPC.

- **The role of the income on family conflicts.** During interviews, several people claimed that family conflicts have reduced as a result of the interventions (FXBV1 and FXBV2). Indeed, stress generated by chronic financial issues is reduced when livelihoods improve: there is no need for an impact survey to acknowledge the positive role of an increase in income on family conflicts because this is a universal phenomenon. However, it is not possible to deduct from this assertion that domestic violence has also decreased (though some women suggested it did during interviews), because domestic violence is a complex issue with a strong cultural dimension. Besides, FXBIS did not define any indicator of domestic violence and therefore there is no baseline value or any other indication of any change in domestic violence.

- **The role of FXBIS in the aftermath of the Thane Cyclone.** A benefit -unplanned because it could not be predicted- was systematically mentioned during interviews: the distribution of food and emergency supplies immediately after the Thane cyclone, which battered the coast in the last days of 2011. When disaster struck, FXBIS had been present in MCC and CK for 2 years and it was able to react very quickly: it was the first agency on the ground, providing people with first necessity items (food of course but also tarpaulins to cover damaged thatched roofs or replace destroyed roofs, mattresses, stoves, plates, etc.). FXBIS provided the government with primary information on exact losses, on the basis of which the

authorities were able to organize their relief operations. Not only people have not forgotten what FXBIS did for them but this certainly helped forge a special bond between the NGO and the population, further facilitating the implementation of FXBV1 and later facilitating activities in MPC (FXBV2, started in 2013), since emergency relief was also extended to MPC. In other words, the efficiency of FXBIS during times of emergency became a factor of efficiency in the implementation of activities. An episode of dramatic floods (November/December 2015) also gave FXBIS an opportunity to provide emergency support.

- **Building community resilience.** The fact that people mentioned emergency relief as a key “impact” is a reminder that the targeted communities are still fragile in front of such events: graduating from extreme poverty by crossing the highly theoretical poverty line is supposed to translate into more resilience but it does not diminish the memories of past trauma and it does not lessen the fear of an event of catastrophic proportions (let us remember that CK was also badly hit by the tsunami in December 2004). Besides, in spite of evident economic benefits, some HHs remain more fragile than others (always for health-related reasons) and keep bordering on the line of rehabilitation/development, in spite of IGAs. To help mitigate the risks and further contribute to the resilience of the communities, FXBIS is now part of the Inter Agency Group (IAG), a consortium of civil society organizations in Tamil Nadu. IAG focuses on disaster risk reduction and aims at exchanging information and ideas between NGOs. It emerged because a need for NGOs to develop synergies for better effectiveness of relief operations became obvious, in the wake of contemporary disasters in Tamil Nadu. In this context, FXBIS has trained villagers for disaster preparedness, though this benefit was never highlighted by the beneficiaries during the interviews.

- **Tracking the situation of HHs after the project.** It is not easy to keep track of the exact number of HHs still involved in IGAs because 1/ the frontier between the collective IGAs is sometimes porous (e.g. some of the women currently involved in the sanitary napkin unit were formerly involved in the coir group), 2/ FXBIS observes, suggests, motivates, implements, monitors but what happens beyond the implementation of activities is beyond its direct control and the project team cannot interfere with internal decisions made by families and/or the communities. For instance, 10 women were supposed to be running the poultry unit but the unit is in fact managed by 10 men and though these men are all from MPC, it is unclear whether they belong to the same HHs whose female members were supposed to be involved. Having said that, at the time of the evaluation, 30 HHs were still benefiting from the income generated by a collective activity. Under FXBV2, many women who were not involved in any collective IGA were able to engage in an individual IGA: for example, 3 women have started a small eatery on the FXB campus and sell meals at lunch time, a man was hired to guard the FXB campus. Discussions with beneficiaries and the project staff confirm that most of the individual IGAs introduced during FXBV1 and FXV2 have been sustained, but not all of them. In MCC, some people have traded cows for goats. Others have become masons: this is a remunerative job requiring specific equipment, suggesting the IGA developed by FXBV1 has allowed the beneficiary to further invest and move on. The fact that beneficiaries were requested to contribute financially to the assets provided by FXBIS to develop the IGA did contribute to the sustainability of the individual IGAs. Did all HHs of MPC benefit equally from the IGA component? Probably not, because 1/ individual IGAs developed in close connection with the FXB campus activities benefit from a good dynamics (e.g. the eatery is located by a major road) as compared to other individual IGAs (e.g. a petty shop in MPC is bound to have a limited number of customers); 2/ the specific socio-economic background of each HH does influence the outcome of an IGA, independently from the role of FXBIS; 3/ individuals involved in collective IGAs also receive many intangible benefits, as compared to individuals IGAs.

- **Vulnerability.** On the negative side, there is evidence that some IGAs have failed. The reasons are not always known but interviews with a few beneficiaries unable to sustain the activity reveal –unsurprisingly– that the activity was dropped and/or individual assets be sold because of serious health-related issues (at least two examples in FXBV1 and one in FXBV2). For these families, the accrued benefits of the IGA were not sufficient to build resilience and to mitigate the negative impact of a serious and/or chronic disease. It is unclear whether these are isolated cases or whether each beneficiary HH is still in such a fragile position that a serious health issue would annihilate years of benefits cumulated under the FXB programme. In such circumstances, there are not many options: while men can go back to agricultural work (but this is not a permanent occupation), NREGA remains a safety net for women. A few women from MCC confirmed they continue to work for NREGA, for as much as 40 to 70 days a year. Besides the president of the PRI confirms

that a large number of women from Mathur (as much as 40% to 50% of the HHs, according to him) regularly work for NREGA. This confirms women are aware of the risk that things can go wrong very rapidly: even though they no longer go for 100 days of work because most have a regular occupation, they make sure they keep their NREGA card “just in case”. In order to retain the card, they regularly put in a few days of work for this national scheme, for which they receive a daily wage of INR 120 to 130.

⇒ **LESSON LEARNED (LL4).** There is another intangible benefit to a collective IGA: a serious health issue may force an individual to retire temporarily or permanently from the collective activity but the productive assets will not be affected (as they do not belong to the HH) and the individual will have every opportunity to resume the activity if/when his/her condition improves.

- **The issue of the day care centre.** FXBIS ran a day care centre under FXBV1, which was attended by about 30 children (aged 3 to 5) and highly appreciated by women, who complained the activity was stopped when the project ended. Under FXBV2, a day care centre was started but ended in April 2014: according to the project team, the number of children (11) was insufficient to maintain the activity. It is true that MPC is a small community but this could have been anticipated. Besides, it was a planned (useful) activity. This evaluation did not delve into the reasons for the closure of the day care centre. However, during an interview, the lack of a facility to care for young children while mothers are at work was also highlighted by a beneficiary in MPC, independently from comments made by women in MCC. The absence of a day care centre prevents younger women from participating into activities and earning money. The day care centre is indeed a factor of economic empowerment, but unsustainable because of its costs. There is a governmental-sponsored child care centre (“anganwadi”) in the main Mathur village but it is too far from the Dalit colonies, i.e. not convenient.

⇒ **RECOMMENDATION (R3).** In its future interventions, FXBIS may want to address the need for a sustainable day care centre where the targeted communities are living and working.

- **Conclusion.** Whether individual or collective, the IGAs promoted by FXBIS have had a positive impact on the individual income of the targeted beneficiaries. The rise in income positively impacted the livelihoods of most targeted HHs. Collective IGAs are associated with many intangible benefits, but individual IGAs tend to generate higher monthly individual incomes. The income generated by collective and individual activities contributes to the family income but is not sufficient to sustain an entire HH, as evidenced by the fact that women-headed HHs having benefitted from an individual IGA tend to multiply occupations and sources of income. And while the resilience of the HH has been built through the different projects of the FXB programme, beneficiaries remain vulnerable to serious health-related issues, which may force them to abandon the IGA and sell productive assets.

3. Performances & Sustainability of the Collective Income Generating Activities

3.1. The Coir Manufacturing Unit

- **Background.** Coir rope is a traditional product made of dry coconut fibre and is found everywhere in South India. It has multiple purposes (packing, construction, etc.). The demand is high and the technology is accessible. It can be made manually (2 groups of 3 women each are currently making coir rope with a manual machine in MCC, a sustainable activity started under FXBV1) or by using a more sophisticated automatic machine, which incorporates a nylon thread into the coconut fibre and can make four bobbins of coir rope at a time. FXBIS equipped a group of women with two such machines, each costing about INR 150,000 (about USD 2200). The coir unit started operating in March 2014, after the machines were installed and the women trained. A group of 9 individuals (the coir CLG) now runs the coir unit, including 7 women in production and 2 men in marketing (two husbands were involved to facilitate accounting and marketing). FXBIS was in charge of the operation until the end of January 2016: they paid the women monthly on the basis of attendance. In February 2016, since the unit was profitable, FXBIS handed it over to the CLG.

- **The performance of the coir unit from March 2014 to January 2016.** Key indicators for the coir unit are presented in the table below. The raw data was compiled by FXBIS from March 2014 until January 2016. The calculation shows the average market price over the period (INR 34.05 per kilo of coir rope) was slightly over the average production cost (INR 33.74), including labour costs.

COIR MAKING UNIT - AVERAGE PRODUCTION COST AND INDICATORS FROM MARCH 2014 TO JANUARY 2016

Source: Evaluation mission, data provided by FXBIS (see Annex 5 for the raw data and the calculation of the average production cost)

INDICATOR	UNIT	VALUE	SOURCE
Cumulated production of coir rope from March 2014 until January 2016	Kg	14,488	FXBIS registers
Cumulated number of woman-days of production March 2014 –January 2016	woman-day	2148	FXBIS registers
Cumulated wages (same period)	INR	253,350	calculated from FXBIS registers
Cumulated sales - coir rope (same period)	INR	493,251	calculated from FXBIS registers
Average market price of coir rope	INR / Kg	34.05	calculated from FXBIS registers
Average production cost including labour cost	INR /Kg	33.74	See Annex 5 for the raw data and the calculation of the production cost

- **The performance of the coir unit from February 2016.** As women took over the production in February 2016, FXBIS provided them with a stock of coir fibre (which the CLG turned into seed money) and they have been running directly the operation ever since. The indicators for 2016 are not known (the files and data are no longer with FXBIS) but in September 2016, they made the decision to increase their daily wage from INR 125 to INR 160 per woman (i.e. a substantial 28% increase), an indication that the performance of the unit has further improved under the management of the group.

- **Institutional capacity of the coir group.** As far as institutional capacity is concerned, the CLG is not officially registered as a group. As a result, it cannot open a dedicated bank account, cannot approach a bank to borrow money at preferential rate, for instance to buy another machine (in future, the group wishes to increase its production). It does not have a proper book of accounts. FXBIS and the women explain it is complicated to turn the group into a legal business entity, considering the huge cost and administrative complications associated to red tape. Currently, the business is done using the bank account of one of the women. Overall the positive performance of the coir CLG is an excellent achievement but the institutional situation limits the economic empowerment of the women, as a group.

⇒ **RECOMMENDATION (R4).** While it is clear that 1/ the cooperative concept is beyond the scope of this IGA, 2/ the capacity of the women to deal with the registration of a business is limited, 3/ the cost of an established business is likely to make the unit unprofitable (financial accounting, audit), FXBIS should nevertheless explore further options, such as the conditions and benefits attached to the official status of CLG (including the possibility to register the CLG with The Tamil Nadu Societies Registration Act and/or the Tamil Nadu Corporation for Development of Women) with a view to strengthen the institutional capacity of the CLG, a pre-condition to economic growth and a key factor of sustainability.

3.2. The Poultry Farming Unit

- **Background.** A poultry barn with a capacity of 1500 birds/batch was built on the campus of FXBIS in 2013. The shed was installed on a piece of land FXBIS bought with a view to establish a long-term presence in Villupuram and to support collective IGAs. The first batch started in December 2013. The poultry unit has been operating for three consecutive years. At the time of the evaluation (December 2016), 12 batches had been completed, including 4 batches in 2016, which is an evidence that the poultry unit continues to operate. The first 4 batches in 2014 were run by FXBIS staff, who wanted to ascertain the profitability of the activity before handing it over to the poultry group. The poultry CLG is comprised of 10 men, assisted by a few women for intensive manual activities, such as preparation of the litter, vaccination of day-old chicks, cleaning.

- **Performance indicators and benchmarks for the poultry unit.** The only way to assess the performance and likely sustainability of the poultry unit is 1/ to calculate the values for key technical and economic indicators for all 12 batches, 2/ to compare batches with each other and 3/ -most importantly- to compare each batch with benchmarks, which are the target values to be achieved for a poultry unit of a similar dimension in a similar environment. Benchmarks were provided by the company “Pritha Broilers”, which supplies chicks and feedstuff to the poultry unit and buys the finished birds. The table (next page) provides an overview of the values for the technical and economic indicators for all 12 batches. Unfortunately, this table was not prepared by the poultry group, nor by FXBIS but by the evaluator, although it is a key management tool for a poultry operation. Target values (benchmarks) were not known by FXBIS or the CLG. The raw data used to prepare this table were available for each batch (an evidence that the CLG and FXBIS knew it was important to collect the data) but key indicators were not defined (and thus not calculated) and the data were not consolidated and therefore not comparable. The project team was not clear on how to measure the performance of the poultry unit. For instance, the mortality was recorded as the absolute number of dead birds whereas the key indicator is indeed the mortality but as a percentage of the number of day-old chicks and it is important to keep it under 2.2% (benchmark). However, for all but one batch, the mortality was higher (and often much higher) ranging from 2.3% to 10.5%, which is not good at all. The Feed Conversion Rate (the ratio between the total quantity of feed utilized and the total weight of birds sold for the batch) is one of the four key indicators to be measured and kept under control: the value must be below 1.7 (only 4 batches are below or close to this upper limit). Chicks must be purchased when they are not too expensive (less than INR 30 per chick): this rule is well known and observed by the poultry group. Last but not least, the total cost of production (feed + chicks + other costs) per kilo of live bird must not be above INR 65 (only 4 batches were under INR 65, and this does not take into account “other costs” typically about for INR 5 / kilo of live bird). Conclusion: the current values of the technical indicators and the cost of production are not good enough.

⇒ **RECOMMENDATION (R5).** For each future batch, the project team must continue to measure the performance of the poultry unit by completing the table prepared during the evaluation. Ideally, the poultry group should be trained to do it. The men will develop an understanding of which indicators need to be under control and, in case a value is out of the control range (especially the percentage of mortality, which must be controlled everyday) they should seek technical guidance from Pritha Broilers.

- **Overall performance of the poultry unit.** All 12 production cycles have generated a profit, ranging from INR 6,620 (first batch run by FXBIS) to INR 58,171 (batch # 6 run by the men). The average profit/batch is INR 34,584 (including the batches run by FXB). The profit/batch for each man (the group is comprised of 10 men) ranged from INR 2,375 to 5,817 (excluding the batches run by FXBIS). If we divide this number by the number of days in a batch, we can the average profit per men and per day, which ranges from INR 65 to INR 129. This is less than the NREGA daily wage but since poultry is a side occupation for all the men running the poultry group (some have a job, others are students), there is no small profit. Conclusion, profit was systematic in spite of average to bad technical performances, which suggests: 1/ the poultry group was lucky to benefit from good market prices, which mitigated the poor technical performances; 2/ the poultry unit is profitable because there is no mortgage on its fixed assets, which also means the activity is not replicable under “normal” (i.e. unsubsidized) circumstances and 3/ there is room for improvement and

higher profits if the technical skills of the poultry group improve and the unit is better managed.

SURAKSHA POULTRY ENTERPRISE - VALUES FOR TECHNICAL AND ECONOMIC INDICATORS FOR ALL 12 BATCHES IN 2013 - 2014 - 2015

Source: Values calculated by the evaluation mission, raw data provided by FXB (for all 12 batches) and by Pritha Broilers Company (for the benchmark data)

INDICATORS		VALUE OF THE INDICATORS FOR EACH BATCH SINCE THE START OF THE POULTRY UNIT											
DEFINITION	BENCHMARK PRITHA BROILERS	1	2	3	4	5	6	7	8	9	10	11	12
Batch - starting & ending dates	BENCHMARK VALUES FOR KEY INDICATORS	21/12/13 28/01/14	26/03/14 01/05/14	29/06/14 08/08/14	21/10/14 05/12/14	15/02/15 24/03/15	04/04/15 18/05/15	12/07/15 22/08/15	04/10/15 13/11/15	14/01/16 28/02/16	28/03/16 07/05/16	20/05/216 27/06/16	09/09/16 15/10/16
Batch run by	standard broiler farm in Kalapet area	FXB	FXB	FXB	FXB	men group	men group	men group	men group	men group	men group	men group	men group
Duration of the batch (days)	40 days +/- 4 (36 to 44 days)	39	36	41	46	38	45	42	41	46	41	39	37
# of days since previous batch	5 batches / year		56	58	73	71	10	54	42	61	28	12	73
# of day-old chicks	depends upon the size of the farm from 1500 to 3000 birds	1 400	1 542	1 307	1 370	1 500	1 470	1 530	1 530	1 500	1 500	1 500	1 500
Mortality (number of birds)	Intermediate indicator *	50	35	73	120	114	30	89	181	68	158	77	54
Mortality (% of # of day-old chicks)	2 to 2,2 %	3,6%	2,3%	5,6%	8,8%	7,6%	2,0%	5,8%	11,8%	4,5%	10,5%	5,1%	3,6%
Total quantity of feed utilized (kg)	Intermediate indicator *	4600	4650	4250	4850	4900	5500	5500	5000	4000	4600	4500	5000
# of live birds sold	Intermediate indicator *	1 350	1 507	1 234	1 250	1 386	1 440	1 441	1 349	1 432	1 342	1 423	1 446
Average weight of live bird sold (kg)	2.04 kg @ 38 days 2.34 kg @ 42 days	1,90	1,88	2,01	2,21	1,86	2,20	1,87	2,07	1,70	1,80	1,75	2,01
Total production of the batch (kg)	Intermediate indicator *	2565	2827	2480	2765	2578	3168	2701	2792	2434	2416	2490	2906
Feed Conversion Rate (FCR) kg feed utilized / kg live bird sold	1,6 to 1,7	1,79	1,64	1,71	1,75	1,90	1,74	2,04	1,79	1,64	1,90	1,81	1,72
Cost of a day-old chick (INR)	20 to 30	29,0	16,0	22,0	28,5	19,5	29,5	39,0	19,0	21,5	24,0	26,0	38,0
Cost of feed (INR/kg)	29	28,1	30,2	29,9	25,9	26,4	30,5	29,8	31,3	30,0	30,0	26,0	38,0
Total feed cost (INR)	Intermediate indicator *	147750	108540	138860	125490	129260	167885	161600	156300	120000	138000	135000	150000
Total Production cost (INR)	Intermediate indicator *	198580	139419	173 537,00	169514	161865	217445	229224	189100	158200	180635	179200	215386
Total cost / kilo of live bird (INR/kg)	65	77	49	70	61	63	69	85	68	65	75	72	74
Average price sold (INR/kg)	55 to 110 (this is not a benchmark, but the range of market prices)	80	65	74	79	72	87	95	80	87	89	90	84
Total revenue for the batch (INR)	Specific indicator**	205200	183753	183500	218435	185613	275616	256595	223360	211793	214988	224123	244143
Net profit for the batch (INR)	Specific indicator**	6620	44334	9963	48921	23748	58171	27371	34260	53593	34353	44923	28757
cumulated profit over the years	Specific indicator**	6620	50954	60917	109838	133586	191757	219128	253388	306981	341334	386257	415013
Profit / men for the batch	Specific indicator**					2375	5817	2737	3426	5359	3435	4492	2876
Profit / men / day (batch duration)	Specific indicator**					62	129	65	84	117	84	115	78

(*) intermediate indicator: data used for the calculation of key indicators (there is no benchmark for intermediate indicators)

(**) Specific indicator: indicator specific to the FXB programme (no benchmark)

Indicators highlighted in grey are KEY indicators for broiler production units (all over the world, whatever the size of the farm)

- ⇒ **RECOMMENDATION (R6).** Poultry farming is not overly complicated as an activity but market conditions can make it a risky operation. The poultry group can decide when to start a batch but once a batch has started, the duration is not flexible (about 40 days): market prices will determine the profitability of the batch. For the sake of sustainability, risks can be minimized and profit maximized by improving technical skills, which can be achieved by securing and strengthening a mutually beneficial relationship with a trusted business partner, i.e. the company that supplies the chicks/feed and buys the broilers. Once a relationship is secured, technical guidance and support - always needed- can be obtained (for free) from the supplier and on-site. This also entails that the poultry group should not compromise quality for better prices: purchasing quality day-old chicks is key to the success of the operation, which again is possible with a trusted supplier. In other words, the poultry group must refrain from buying day-old chicks at the best possible price, irrespective of the quality. FXBIS should advise the group against such a practice and help the group strengthen a long-term relationship with Pritha Broilers. Another way to maximize the profit is to decrease the number of days in between two batches and to run 5 batches/year, which is the target value (so far the average has been 4 batches/year), but this probably requires a little more confidence, which will be acquired with experience.
- **Institutional capacity of the poultry group.** The poultry unit is currently co-managed by FXBIS and the poultry CLG. For instance, it is the project staff who follows up with the price of the day-old chicks and determines when a new batch should start. Obviously, the ultimate decision to start of batch is with the poultry group but FXBIS plays a key part in the decision. Besides, the poultry group is not a formal group but a loose association: the group does not have a bank account, supplies are paid by whoever has enough money to pay for the invoice (accounts are squared when the chicken are sold) and the group often lacks sufficient funds to buy the chicks and the feed and still needs support from FXBIS because the profits are too small to allow for capital build-up (men says they sometimes borrow from neighbours). In other words, the poultry operation is not autonomous and not fully sustainable.
- ⇒ **RECOMMENDATION (R7).** The poultry CLG must be entrusted with the management of the unit as soon as possible: it should have proper seed fund (the coir group was provided with coir fibre in guise of seed money, the poultry unit should enjoy the same benefit), a dedicated bank account and the involvement of FXBIS in management decisions should be minimal, limited to solicited guidance. The presence of the poultry group on the FXB campus must be attached to performances: it is not because collective IGAs are considered as “social enterprises” that they should not be run like a proper business with clear performance indicators, quite the opposite. For instance, two consecutive batches with profits either negative or below a certain level (to be determined by the poultry group and FXBIS) should make FXBIS reconsider the presence of this poultry group on the campus: perhaps another group of more motivated/capable of individuals (men or women) from the villages under the FXB programme would do better and generate more profit (thus more social impact) from the productive asset created by FXBIS and funded by TF? Perhaps knowing that their presence on the campus is not to be taken for granted would further motivate the men to do better and achieve higher profit? Besides, FXBIS should explore the possibility to formally register the poultry CLG to give it an institutional capacity.

3.3. The Sanitary Napkin Unit

- **Background.** Health camps held under FXBV1 and under other interventions implemented by FXB in the past had shown that women who did not use sanitary pads (a majority of them in the target area before the FXB programme started) were at risk of developing reproductive tract infections and other gynaecological issues. Besides, there was a momentum building around women-run cottage SNUs in other parts of Tamil Nadu. In parallel to FXBV1, two SNUs were started: one in CK, one in MCC. Both were supported by the Fondation ELLE. The financial contribution of TF to the activity was limited to one machine but the unit in MCC provided employment to beneficiaries targeted by FXBV1 (9 women). However, most women employed in the SNU in CK were not part of HHs targeted under FXBV1 (according to the document “Details of benefits received by households of Chinna Kalapet, Pondicherry 2010 – 2012”, only two HHs supported by FXBV1 were involved in sanitary napkin marketing, and none in production). The unit in MCC was started in November 2011, a month before the Thane cyclone struck the coast of Tamil Nadu, leaving behind a trail of destruction: the machines were damaged and the raw materials destroyed. The SNU was stopped for three months, then production resumed. However, it was closed when FXBV1 ended, for a lack of funds, suggesting the unit was not profitable (and indeed it had many marketing issues): while a few women managed to find another occupation (e.g. one works in a hospital, another in nearby Auroville), others had no other option but to rely on NREGA again. In September 2013, FXBIS restarted the napkin activity as a collective IGA under FXBV2, this time with a group of women from MPC. The SNU was installed in the very premises of FXBIS in Villupuram, more specifically in the office it rents in Kazuperumpakkam. 9 women from MPC have been trained and have developed an expertise in making sanitary napkins. The other SNU in CK was started in 2012, employing 13 women. According to the project staff, the SNU in CK was profitable and the production continued after the end of FXBV1, until it was ravaged by the floods in December 2015 and definitely closed. What the 13 women did after the closure of the unit is not known. The SNU in CK and in MCC produced different types of sanitary pads: MCC was specialized in maternity pads (for hospitals) while CK produced wings-type pads for everyday use. While there is a good market for wings-type pads, raw materials (imported from China) were a regular issue. Besides the machine was damaged by the flood. This explains why the CK unit was not restarted after the floods. What follows is about the SNU installed in the premises of the FXBIS office, with support from TF under FXBV2.

- **The overall performance of the Sanitary Napkin Unit.** The SNU is managed by the project team. The 9 women who work in the SNU are wage workers: their attendance is recorded daily by the staff, they are paid monthly by FXBIS on the basis of attendance. The unit is still functioning but it is not profitable. In spite of this, after the end of the support by TF, a decision was made by FXBIS to continue supporting the SNU (with its core fund) as the management considered the SNU plays a strategic role for the community, from both a social and health standpoint: it supports the livelihood of 9 women (women get paid whether the unit makes a profit or not) and it contributes to promoting the use of sanitary napkins among women, including teenage girls. While the poor performance of the SNU is well known, it is unclear whether all the facts and data were known to the management when the decision to keep the SNU afloat was made. This evaluation gathered attendance data from the monthly registers of the SNU since September 2013 and then defined a few key indicators to help assess the true economic impact of the SNU for the group members. It also consolidated financial, production and commercial data to determine the average cost of production for a sanitary napkin (more specifically a maternity pad) and the average amount lost by FXBIS for each napkin it sold in 2016. The purpose of this analysis is to provide FXBIS with facts that may prompt a change in its strategy for the sake of the beneficiaries of the FXB programme, not only the beneficiaries of FXBV2 but also future beneficiaries.

- **Key indicators for the Sanitary Napkin Unit.** The indicators of the SNU are presented on the next page. Values for the selected indicators have been collected and/or calculated for each year from 01/09/2013 until 30/11/2016. In addition, a fifth column provides the maximum value for each indicator, i.e. which corresponds to the maximum production capacity of the unit operated by 9 women. The main finding is the following: the average number of days of attendance per woman and per month (key indicators highlighted in grey in the next table) has considerably declined since 2013, more precisely by 61% between 2013 and 2016. For the first 4 months of operation in 2013, attendance was at its peak: 18 days of

work/woman/month (i.e. 216 days a year), which did correspond to the average numbers of days a woman can theoretically dedicate to her work in the SNU in a month, taking into structural constraints in Tamil Nadu (including holidays, festivals, electricity cuts, see the table for further explanations). In comparison, the value was respectively 12 and 11 for 2014 and 2015. It further decreased to 7 days/month in 2016. Under the wage system, a woman can only earn money when she works: mathematically, the average monthly income of each woman working in the SNU has decreased by 52% between 2013 and 2016, from INR 2250/month down to INR 850/month. The decrease in income is not 61% because the daily wage was increased by FXBIS from INR 100 to INR 125 in August 2014.

MAIN INDICATORS FOR THE SANITARY NAPKIN PRODUCTION UNIT FROM 2013 TO 2016

Source: Evaluation mission based on data provided by FXBIS

INDICATORS	FORMULA	DATA SOURCE	2016 until 30/11/2016	2015	2014	2013 Sept to Dec	Maximum Annual Capacity	Comments / Assumptions
Number of months in the time period	A1	FXB-IS registers	11	12	12	4	12	
Number of effective woman-days of work for the time period	A2	FXB-IS registers	673	1147	1349	637	1944	1944 = 216 days (*) X 9 women (see the assumptions below)
Average number of effective woman-days of work / month	A3 = A2 / A1	calculated	61	96	112	159	162	
Average number of days effectively worked / month / woman	A4 = A3 / 9	calculated (9 women)	7	11	12	18	18	
Daily wage rate (INR)	A5	FXB-IS registers	125	125	100 & 125 (see Annex 4)	100	125	As per the Tamil Nadu Labor Act, the minimum daily wage for unskilled labor is INR 187. For skilled labour, it is above INR 200. We have kept 125, a more realistic rate.
Total amount paid to women for the period (INR)	A6 = A2 X A5	calculated	84125	143375	144200	63700	243000	
Average income / woman / year (INR)	A7 = A6 / 9	calculated (9 women)	9347	15931	16022	7078	27000	
Average income / woman / month (INR)	A8 = A7 / A1	calculated	850	1328	1335	1769	2250	
Number of napkins manufactured	A9	FXB-IS registers	38644	61271	52002	13372	118800	FXBIS estimates the daily production capacity of the 9 woman group at 550 napkins (550 X 216)
Napkins produced per woman-day of work	A10 = A9 / A2	calculated	57	53	39	21	61	
cost of labour (INR / napkin)	A11 = A6 / A9	calculated	2,18	2,34	2,77	4,76	2,05	
total sales of napkins (INR)	A12	FXB-IS registers	130230	151469	123085	19375		
Number of napkins sold	A13	FXB-IS registers	42463	58427	43512	7750		
Average price per napkin	A14 = A12 / A13	calculated	3,07	2,59	2,83	2,50		

(*) 365 days minus 52 days (Sundays) - 26 days (Saturdays off every two weeks) - 20 days (national & state holidays) - 6 days (one week festival in May) - 45 days (cumulated days lost due to electricity cuts and fluctuations) = 216

(*) In addition there are many days when the group cannot work because the wood pulp is not available - this is considered an operational issue, not a structural one (it should be within the control of FXBIS)

(*) Women are free to attend (or not) and one of them is always missing (not always the same woman): even though, every day, at least one woman does not come for

work, the capacity is based on the production potential of the 9 women; the fact that the SNU is typically operated by 8 women or less does not change the calculation, which is based on a group of 9 women.

- **An operational issue.** The project team argues there were many days in 2016 when the unit was not able to operate because supplies were not available, a situation -it believes- was beyond its control. When raw materials were missing, women were not able to work, therefore they could not earn, hence the income decreased. But the situation is to be analysed from a different angle: the SNU is losing money, the working capital comes from FXBIS and is insufficient to buy enough supplies so that there is no disruption in the stock of raw materials. Hence the reason why so many days were lost to production is not structural (holidays, no electricity) but operational. The project team does not disagree with the diagnosis: the staff knows that de facto, it cannot be proactive vis-à-vis the SNU. How could it be under the circumstances? Indeed, it has another project to implement (FXBV3), communication issues impacting negatively on its efficiency (dreadful internet connection at the office) and a collective IGA -the SNU-, which loses money every time a sanitary pad is manufactured and sold. Another way to apprehend the situation is to ask: would raw materials be missing for weeks if the unit was profitable? No, the supplies would be managed in such a way that there would be no interruption in the flow of raw materials: women would be able to come regularly and would earn more. Besides, if the unit was profitable, the management would have handed it over to the group and the project team would be only focused on FXBV3.

- **Cost of production and marketing issues.** So why is the SNU unprofitable? The SNU only makes maternity pads, used in hospitals, therefore the profitability of the SNU strictly depends upon hospital orders, mostly government hospitals. Promises made by the government -initially willing to encourage the production of maternity pads by cottage (small) units run by women- were not followed: it is difficult to compete (tendering processes) with large supplier of pads (international brands), whose production costs are much lower due to economies of scale. Another marketing issue stems from the fact that hospitals take time to clear invoices, though the SNU is not strong enough financially to sustain delayed payments. These issues were well explained by FXBIS, which highlights the fact that all cottage sanitary napkin units in the vicinity (about 10 of them, encouraged by the government) have already closed for the same reason. The SNU run by FXBIS is the only one left and it has continued to operate because it lowered its price in order to stay in the game with hospitals and continue playing its social role with the target community. By doing so, it ended up selling the pads at a cost well below the production cost. To cover the losses, FXBIS provisioned about USD 2000 for 2016 but does not know precisely how much it loses for each pad it sells. Below is an estimation of the average production cost of a sanitary napkin in 2016. FXBIS also understands that the more the SNU produces and sells at a “subsidized” rate, the more it loses money. It is estimated that the SNU has lost INR 1.81 for each sanitary napkin manufactured in 2016, totalling a loss of INR 76,858 until 30/11/2016 (about USD 1147 @ USD 67/INR) since it sold 42,463 napkins in 2016. Therefore, FXBIS probably lost less than it is believed. But the situation is certainly not an incentive to run at full capacity.

COST OF PRODUCTION FOR 2016 - Suraksha Sanitary Napkin Unit

Source: Production cost for 2016, estimated on 08/12/2016 by the evaluation mission based on data provided by FXBIS

Category of cost	Cost per pad (INR)	Explanations / Assumptions
Cost of labour	2,18	In 2016 (as at 30/11/2016), the group of 9 women produced 38,644 napkins and cumulated 673 days of work which were paid @ INR 125. Calculation: (673 X 125)/38644. For details, refer to annex 4.
Raw materials	2,06	This includes: low definition sheets, non-woven cloth, wood pulp, wrappers, belts, wastage of raw materials
Other costs	0,65	This includes: cost of distribution of the pads, rental expenses, utilities (electricity/water), overheads and others
AVERAGE PRODUCTION COST PER SANITARY NAPKIN IN 2016	4,88	This is a conservative estimate: FXB-IS handles the supply of raw materials and the marketing of napkins/pads. The associated costs have not been estimated.
Average sales price of a napkin in 2016 (INR)	3,07	Total sales for 2016: INR 130,230 (source FXBIS registers) Total number of pads sold in 2016 = 42,463 (Source FXBIS registers)
Average loss per napkin (INR)	1,81	Average 2016 production cost per napkin minus average 2016 sales price per napkin

Total/cumulated loss for 2016, until 30/11/2016 (INR)	76,858	Average loss per napkin X number of napkin sold in 2016 (42,463). The production cost is estimate for 2016. Some of the napkins sold in 2016 were made in 2015 (since more napkins were sold than produced). For the calculation, we assume the production cost was the same in 2015.
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- **Strategic issues.** In the light of the above, let us review the reasons why the unit was kept afloat in 2016. Support the livelihood of women? They are earning less and less: their average monthly income has declined by 61% since the unit started, in spite of an increase in the daily wage. Promote the use of sanitary napkins? Achieved and sustainable. Indeed, this is the true impact of the SNU: the use of pads has spread among women and adolescent girls and there is no coming back. However, they buy branded products from the local grocery store because the SNU only produces maternity pads for hospital use,

- **Conclusion.** Not only the SNU is losing money but its social mission vis-à-vis the group of 9 women is slowly but surely failing. Besides the unit is no longer useful for the promotion of napkins. As per the above calculation, FXBIS will continue losing money at the average rate of INR 1,81 for each napkin produced and sold. But most importantly the staff is wasting precious time and energy in running an unprofitable activity. FXBIS has limited resources which could/should be dedicated to other tasks, more profitable from a social standpoint. The SNU is trapping FXBIS in a vicious circle, whereby the lack of profitability generates operational issues, which in turn undermine the very objective of the IGA, i.e. positive sustainable socio-economic impact for a group of 9 women: the production is going down and the women of the sanitary napkin unit are benefitting less and less. What do women do when there is no work at the unit? They work for NREGA (they get paid INR 120 to 130/day, against INR 125 by FXBIS). However, FXBIS has created a group of skilled women and feels it has a responsibility to continue supporting them.

⇒ **RECOMMENDATION (R8).** Acknowledging the fact that the activity no longer serves its purpose (i.e. not just the fact that “the unit is losing money”) is therefore very difficult but is the first step to solving an issue and making the right decisions. This is not a recommendation to abandon the women but a suggestion to consider closing the unit. Such a decision should be backed by a plan to phase out the activity and reorient women, to help them switch to a *proven* collective IGA such as coir rope, which has demonstrated its profitability and sustainability (with the understanding that the existing coir unit cannot support more women). This is easier said than done. But, if FXBIS is ready to continue spending money to compensate for the losses of the SNU for many years to come, it could instead decide to dedicate the same amount to developing another collective IGA for women. If FXBIS wants the women working in the SNU to enjoy the same level of economic benefits as the women of the coir unit (in 2015 the incomes of the women were comparable for both groups, refer to the table on the next page), then FXBIS is likely to spend around INR 110,000 per year: for women to earn as much as they did in 2015, the unit would have to go back to its 2015 production level, i.e. 61271 pads; the loss for FXBIS would be $61271 \times \text{INR } 1,81 = \text{INR } 111,000$ with the assumption that the number of pads produced is equal to the number of pads sold. Assuming FXBIS is ready to support the SNU for another three years, it would have to spend about INR 330,000 to cover the losses: instead, this sum could be provisioned and invested in another IGA. Women highly appreciate the collective dimension of the activity but they are probably more flexible and willing to switch than the project staff thinks (some have already worked in the coir unit). Alternatively, FXBIS could analyse the situation of each woman and help them either develop an individual IGA (e.g. a dairy cow) or join a future collective IGA (under FXBV3).

- **Post conclusion, an efficiency-related consideration.** Adding to the complexity of the issue, the SNU is located in the premises of FXBIS in Kazuperumpakkam, the village where FXBIS has its office. However, the internet connection is simply dreadful in the office and obviously a cause for inefficiencies: for instance, the programme officer must run to the nearby FXB campus -where the internet connection is good- whenever he has an urgent mail to send but failed to do so from the office after repeated (i.e. time-consuming) attempts... Besides, activities are multiplying on the campus (rope making and poultry unit from FXBV2, a computer centre and a small textile unit in the future), often requiring the presence of the staff, who also lunches there as 3 women from MPC have joined hands in running a small roadside eatery. Why hasn't FXBIS moved its office to the campus? Limited space on the campus is a reason but the presence of the SNU in the office also prevents the move: if the office goes away, what to do with the SNU as campus space is indeed limited? Unfortunately, this conclusion is another blow to the SNU unit, already blamed in this

report for distracting the project staff from essential duties.

⇒ **RECOMMENDATION (R9).** For the sake of efficiency, consider moving the FXBIS office in Kazuperumpakkam to the FXB campus.

3.4. Collective IGAs: Synthesis and Conclusions

- **Comparative performances of the 3 IGAs.** FXBV2 provides three examples of collective IGAs having achieved various levels of performances across the scale of profitability, ownership and sustainability:

- The coir unit is profitable and the ownership is excellent. Women are empowered: they master the economics and the logistics of the activity, they no longer need FXBIS and they now run the unit by themselves. Further sustainability prospects are promising although the group has no institutional capacity of its own.

- The poultry unit is also profitable but profit is at risk, owing to management weaknesses. The ownership is reasonably good but FXBIS is still involved in some aspects of the management: e.g. the group still relies on FXBIS for the relationship with the supplier, key market information and sometimes working capital. The group has no institutional capacity of its own. Provided management is improved (strengthening the monitoring of indicators and linkages with the supplier), provided full ownership is promoted through appropriate measures (the poultry group is given seed funds and complete control over management), sustainability prospects are good.

- The sanitary napkin unit is still run by FXBIS. It is not profitable and it is not sustainable. The group has an ownership of the unit, but it is limited to the production aspects owing to the unique skills the women have developed. Women are not empowered with management issues: they have limited knowledge of the economics of the unit and though they understand the unit cannot operate smoothly due to supply issues, it is unclear whether they really know why raw materials are not provided on time and why they are not able to work as often as they used to.

- **Comparative annual incomes per person for all three IGAs.** The table below compares the different annual income per person for each IGA. The income levels were rather similar for all three IGAs in 2015 but there is a sharp drop of the income/person for the SNU in 2016 while the income levels remain comparable and are slightly increased for both the poultry unit and the coir unit. Let us highlight that the profit from the different units are shared in a different manner: 1/ the women of the coir group receive a daily wage on the basis of attendance. Women are free to work or not: out of the 7 women involved in the production, sometimes only 4 or 5 of them are present (others are sick, busy with family issues or work for NREGA in order not to lose the benefits attached to their NREGA card). Therefore, the annual income per person is an average income: some women earn more, some earn less. 2/ It is the same situation for the women of the SNU, except that the wage is paid by FXBIS. 3/ However, for the poultry unit, the profit is shared equally between all 10 men at the end of the batch.

ESTIMATED ANNUAL INCOME PER PERSON - COMPARISON BETWEEN THE 3 INCOME GENERATING ACTIVITIES FOR 2015 & 2016

Source: evaluation mission, December 2015

IGA	Number of people	Explanations	2016 estimated annual income/person (INR)	2015 estimated annual income/person (INR)
COIR ROPE UNIT	9	2015: Based on attendance (refer to Annex 5), cumulated income for 2015 (INR 130750) divided by 9 (7 women + 2 men) For 2016: estimate based on 2015 income (average 2015 monthly income - 14427 / 12 = INR 1211- maintained from January to August, then increased by 28% - INR 1550 - from September to December due to increase in daily wages from INR 125 to 160).	15,875	14,527
POULTRY UNIT	10	2015: Cumulated profits for 4 batches (INR 143550) divided by 10 (men) 2016: Cumulated profits for 4 batches (INR 161625) divided by 10 (men) (refer to the table of indicators in the poultry section)	16,163	14,355
SANITARY NAPKIN UNIT	9	2015: Based on attendance (refer the table of indicators in the SNU section). 2016: Cumulated income until 30/11/2016 (INR 9347) + estimate for December (9347/11 = INR 850)	10,197	15,931

- **Traditional activities versus experiments.** There is a common point between poultry farming and coir rope making: market is not a constraint. As explained, coir is a traditional product based on coconut fibre. As for poultry, demographic trends coupled to economic growth explain the increase in the demand for poultry meat (and live birds constitutes the bulk of the sales since consumers prefer freshly culled chicken, hence marketing circuits are rather short). Market prices fluctuate for broilers and by the time they are ready to be sold, market conditions may not be as good as expected, therefore the difficulty is to 1/ to control the cost of production, 2/ to know when to start a batch so that the birds are sold when the market (highly seasonal) is good: the supplier of the poultry unit also has several poultry farms and sticking to the production schedule of the supplier is probably the best strategy for the poultry group. Having said that, both are activities are traditionally found in Tamil Nadu and their profitability is established. In the case of the coir unit, FXBIS “simply” contributed to developing an improved technology for making a traditional product. By comparison and in retrospect, the Sanitary Napkin Unit is an experiment, that turns out to be unsuccessful from an economic standpoint because of complex marketing issues. The fact that other SNUs were developed in the area was not sufficient to ascertain the viability of the activity, though it certainly ascertained it as a trend, reinforced by the hype created around the manufacturing of small machines for the cottage sanitary napkin industry by a Tamil entrepreneur.

⇒ **LESSON LEARNED (LL5).** Some activities are not commercially risky because of the huge and ever growing market in India: milk and poultry belong to this category. Coir rope is also a traditional product in high demand. The point is not to avoid innovation: indeed, innovation is present under FXBV2 in the form of an automatic coir making machine. The lesson learned is to make sure that collective activities developed for the underprivileged communities are viable, i.e. there must be an established market for the products.

- **Business and NGOs.** This lesson learned leads to other another key conclusion. No solid business plans were made before the implementation of the collective IGAs. Besides, though expenses are recorded, production costs are not properly calculated and monitored (e.g. the poultry unit). This is a classic case of an NGO willing to develop a social enterprise without having -by definition- any business experience.

⇒ **LESSON LEARNED (LL6).** A social enterprise cannot afford not to be profitable. A social enterprise can only play its social role if it is economically profitable and sustainable. And it is an illusion to believe that an NGO can design and run a business. It can create the circumstances that will prompt individuals or groups of individuals to develop and successfully run a business on the long run but an NGO is not qualified and equipped -financially, technically and institutionally- to run an enterprise. FXBIS has learnt this lesson with the SNU: for another project it is currently implementing, FXBIS has hired marketing staff, taking stock of the difficulties it has selling the sanitary napkins at a decent price in Tamil Nadu. However, this evaluation wishes to further insists on the lesson learnt because it is certainly one of the key learnings of the project.

- **Economic benefits compared to investment.** The next table compares the cumulative economic benefits for the beneficiaries (the total amount of income all of them received since the start of the activity until 30/11/2016) and the level of investment in the different activities (as per the FXBV2 finance report in 2015). The cumulative economic benefits are higher for the women working in the SNU but the ratio benefits/investment is lower because the benefits are offset by the losses incurred by FXBIS. The calculation of the losses for the SNU is based on the assumption that each pad manufactured has been sold at a loss of INR 1,81 per pad: this may not be exact for every year but this provides an estimate approximation of the losses (and this is assuming the unit was never profitable). The losses were covered by TF until December 2015, then by FXBIS in 2016. The ratio for the poultry unit is boosted by the fact that FXBIS ran the first 4 batches and made some profit (which was later used as working capital for the collective IGAs, as per the needs). These calculations cannot pass for a cost-effectiveness analysis (the concept is more complex) but they nevertheless provide an idea of the value of the different collective IGAs against the initial investment.

COMPARATIVE BENEFITS OF THE DIFFERENT COLLECTIVE IGAS TO DATE

Source: evaluation mission based on calculations and estimates (see Annexes)

IGA	Start date of the unit	Expenses (as per the FXBV2 finance report 2015) USD	Cumulative income for beneficiaries until 30/11/2016 INR	@65 USD	Additional income/loss for FXBIS	Cumulative benefits + additional income or loss for FXBIS / Expenses	EXPLANATIONS
COIR ROPE UNIT	March 2014	32,018	371,493	5715	Breakeven (no profit, no loss)	18%	INR 253350 until 31/01/2016 INR 76293 from Feb to August (INR 1211 X 9 X 7) INR 41850 from Sept to Nov (1550 X 9 X 3)
POULTRY UNIT	15/02/2015 (first batch run by group)	30,102	415,013	6385	PROFIT INR 109,838 (from first 4 batches) = USD 1690	27%	Refer to the table of indicators under the above section "Poultry Unit"
SANITARY NAPKIN UNIT	September 2013	27,716	435,400	6698	LOSS 165,289 (X 1,81= INR 299,173 = USD 4600	8%	Refer to Annex 4 - total number of pads produced since 2013: 165,289

- **The institutional issue.** Common Livelihood Groups have no official existence. These are loose groups of people engaged in a collective activity. The situation has benefits (e.g. hassle-free from an administrative standpoint) and drawbacks (the group has no institutional existence, no bank account, is not eligible for loans, etc.). The first semester progress report of FXBV2 (2013, page 7) said: *"These IGA units will be registered under the coir board and Small Scale Industries (SSI) for further expansion, training and subsidies."* The intention to build the institutional capacity of the groups was there but was not pursued. While there is a logic to first developing an activity and asserting its viability before giving it an institutional dimension, there is also a logic to regularly assessing the performance of the activity, the skills of the CLG and its plans for the future and to decide whether or not the institutional dimension can be further ignored or whether a capacity needs to be explored and developed. Besides, finding the best institutional framework for each group is a challenge as it must not be detrimental to the performances and the sustainability of the collective activities. In short, developing an institutional capacity is a time-consuming activity. It is possible that the project management team has been overwhelmed by the prospect of it and it can hardly be blamed given the load of work.

⇒ **RECOMMENDATION (R10).** The relevance of building the institutional capacity of the coir and poultry CLGs must be assessed. If the relevance is established by both the groups and FXBIS, then FXBIS needs to explore the possibility to formally register the CLGs under the most appropriate Act in Tamil Nadu.

4. The contribution of the FXB programme to hygiene, healthcare and health-seeking behaviours

- **Introduction.** This chapter covers the impact of health-related activities, including direct activities such as health camps organized by the project, as well as activities whose benefits contribute to a better health such as sanitation, hygiene and nutrition.

4.1. The benefits of sanitation, hygiene and nutrition

- **Construction of toilets, quantitative achievements.** When prompted on the major changes in their lives since FXBIS started implementing its programme Villupuram, whether in MCC (FXBV1) or in MPC (FXBV2), beneficiaries do not hesitate for a second: “toilets”. As for outputs, 80 toilets were constructed for all 80 targeted HHs of MCC and 37 toilets were constructed under FXBV2, including 10 of them under a state-level special housing scheme (“Green House”). The beneficiaries contributed 15% (in cash and labour, about INR 2000). For FXBV2, the target (toilets for 48 HHs) was not achieved by the end of the intervention (December 2015) because FXBIS never obtained the financial support it was expecting from the government. However, FXBIS is committed to fully cover MPC and was in the process of constructing additional toilets at the time of the evaluation (but will not cover all 48HHs, some toilets will be shared by neighbouring HHs). Toilets could not be done in CK (FXBV1) because: 1/ a construction requires a land title, which people do not have in CK as they live on governmental land, 2/ CK is a hamlet by the sea and the underground water table is less than 10 feet, which calls for a proper septic tank, which is too costly an infrastructure; 3/ CK is not in Tamil Nadu but in PUT, which does not provide any subsidy for constructing toilets.
- **The end of open defecation.** Even though the start was slow and even though people had difficulties adjusting to toilets (old habits die hard), the sanitation component is a big success among the population, especially among the female members of the family who do benefit more than men (i.e. toilets = the end of harassment). The usage of toilets has spread among the HHs, attitudes have changed, open defecation has disappeared. During interviews, people were prompted on their knowledge of the maintenance instructions for the toilets and their attached pits and responses tend to confirm that maintenance of the pits is not an issue. Another measure of the impact is the fact that neighbouring villages, which were not part of the FXB programme, are asking FXBIS for its support to build toilets. In rural India, sanitation programmes are often developed in cooperation with the local government, which pays for the hardware (the toilets) while the NGO takes care of the “software”, i.e. training the beneficiaries in view of changing behaviours, promoting usage and hygiene as well as maintenance. However, though the government supported FXBIS under FXBV1, it did not provide any subsidy for the construction of toilets under FXBV2: the conditions attached to the governmental sanitation scheme changed between FXBV1 and FXBV2, FXBIS was no longer eligible and had to pay for all the toilets constructed in MPC, which explains why the target was still not achieved as of December 2015.
- **Personal hygiene and access to safe drinking water.** The concept of sanitation does not stop at “toilets”: it also includes personal hygiene, access to safe drinking water, proper disposal of garbage. There is evidence that sustainable improvements have also been made in personal hygiene and access to safe drinking water, owing to many awareness raising and training sessions during both projects. For instance, children are adamant that they now wash their hands and have taught the same to their parents. Besides, the importance of safe drinking water and the role of water-borne diseases is better understood: women boil water more frequently when preparing meals. A Reverse Osmosis (RO) plant was installed by FXBIS in Mathur primary school to secure access to safe drinking water for children: this is not acknowledged in the progress reports (because it was not funded by TF) but this is nevertheless a significant and positive contribution of the FXB programme to the well-being and the health of the children of the Mathur school. The adoption of hygiene-related measures intensified with the realization that the health of the community was improving over time, which further encourage their continuation. As for the disposal of garbage, a mere observation in each targeted community confirms that much remains to be done on this front. The disposal of garbage (as well as waste water) is a complicated and costly infrastructure-related issue, that cannot be easily tackled by NGOs and communities alone.

- The use of sanitary napkins.** The awareness of the benefits of using sanitary napkins (instead of unhygienic rags) was built in parallel to the development of the SNU under the FXB programme. There is no doubt that promoting the usage of sanitary napkin would have been more difficult without the positive dynamics triggered by the SNU. Women working in the units spread the word to other women in their SHG and to their daughters who spread it to their friends. Besides, the fact that women are now working (i.e. earning money) and have an opportunity to leave their homes to go to work indirectly promotes the usage: before the project, women could never have asked a man to buy napkins because of the strong taboo associated with menstruations but now they have the opportunity to buy the napkins themselves. Therefore, the usage of napkins goes hand in hand with the development of IGAs. Women have gotten use to quality wings-type pad, which they used to procure from the SNU in CK. But now that the unit is closed they buy them from their local grocery store (the existing SNU only produces maternity pads, sold to hospitals). Women confirm adolescent girls also use them and that they are used to paying a substantial price (INR 32 per packet of 8 pads) for safe disposable pads. The improvement in the level of comfort and hygiene is such that this is not a habit they will abandon. Once broken, the silence around the issue is not coming back and the shame slowly evaporates: teenagers no longer miss school and women can go to work without feeling tense, embarrassed, dirty.
- Nutrition.** An improvement in the families' well-being through access to good nutrition was one of the expected outcomes of FXBV2. Under FXBV2, demonstration programmes were organized with young mothers and women to promote the consumption of vegetables and green leaves to overcome anaemia. The project team also tried to promote the development of kitchen gardens but the activity was not very successful: it was never mentioned as a benefit by any of the people interviewed (be it under FXBV1 or FXBV2). There is evidence that IGAs played a positive role in improving the quality of the nutrition because a higher income allowed for the purchase of vegetables, as confirmed during interviews. Nutrition was also strongly promoted during the day care centre run by FXBIS as children were fed balanced diets: this is one of the reasons (but not the main one) why women lament the loss of day care centres in MCC (FXBV1) and MPC (FXBV2). The latter was stopped in 2014 and the former was discontinued when the project ended. According to the last progress report, "Households reporting consuming three meals daily" went from 87% (baseline value) to 100% by the end of the intervention and "Households reporting consuming fruits daily" increased from 56% to 90%. Without questioning these values, it is fair to say that the design and sustainability of some components of the nutritional programme of FXBIS can be further improved, for future interventions.

4.2. Changes in health-care access and health-seeking behaviours

- The Pondicherry Institute of Medical Sciences (PIMS) and the health camps.** PIMS is a large missionary hospital run by the Syrian Orthodox Church and wealthy businessmen. It has been the partner of FXBIS for the health component since the start of the FXB programme and it is a major stakeholder in Villupuram. The relationship between PIMS and FXBIS has strengthened over FXBV1 and FXBV2. PIMS has run health camps under both projects and continues to do so under FXBV3, implemented in the nearby village of Nesal where it runs weekly evening clinics to improve the participation of women and children (they can come after a day of work/class). At programme level, the financial sustainability of the camps has drastically improved: under FXBV1, camps were held on a monthly basis and FXBIS used to pay honorariums to the doctors plus the cost of the medicines given to patients; under FXBV2, they only paid for the medicines and camps were held bi-monthly (by the end of the project, camps became less frequent as the health of the beneficiaries improved); under FXV3, camps are held weekly and FXBIS no longer pays for medicines (the evening clinics are entirely funded through the Corporate Social Responsibility (CSR) funds of PIMS). As explained under design, the health component evolved through the different interventions: the focus shifted from general purpose health camps under FXBV1 to specialty health camps under FXBV2. Health camps are opened to nearby villages because a camp cannot single out people. All segments of the population were and are targeted: women, men, adolescent girls and boys, children (boys and girls). Having said that, the highest participation to the camps mostly came/come from women and children, also considered –rightly- as the main drivers of change in health and hygiene behaviour at family level.
- Issue with quantitative data.** Each semester progress report for FXBV2 provides data on health and

nutrition activities implemented during the reporting period. Data are quantitative values for predefined indicators. This evaluation mission strived to consolidate the data found in the different semester progress reports to provide an overview of the quantitative outputs and outcomes of FXBV2 over the project duration (6 semesters). However, the exercise proved impossible for several reasons:

- A lack of consistency in the reporting on indicators: for instance, according to the last progress report (Year 3, Semester 2 – Y3S2), 10 camps were held during the entire project period. However, when cumulating the number of camps held during the previous reporting periods, the total number of camps is at least 13 (“at least” because there is an uncertainty about another value in the Y1S2 report); similarly, the number of health/hygiene training sessions held over the project period (19 according to Y3S2 report) is inconsistent with the cumulated number of health/hygiene sessions held, as per the values extracted from previous progress reports.
- a lack of clarity in the definition of certain indicators: the difference between nutrition sensitization, nutrition awareness, nutrition demonstration and nutrition training is not clear in the reporting and further confusion comes from an apparent change in terminology from one report to the next.
- it is not always clear whether the values are reported for the reporting period (semester) or whether cumulated from the start of the project (for instance page 13 of Y1S2 report indicates that 7 medical camps were held in the project period while also saying that camps are held every two months, which is not compatible since the reporting period covers 6 months).
- last but not least, regarding attendance to events (camps, training sessions, etc.), values are always cumulative: the monitoring system reports on attendance, including repeated attendance, but not on individual beneficiaries. It is time consuming for FXBIS to keep track of repeated attendance because it requires a systematic examination of registers; besides, since health camps are not restricted to FXB villages, anybody can attend, therefore following up with non-beneficiaries for repeated attendance would be impossible. However, while attendance numbers are an indication of the magnitude of the intervention, they are of no particular use for the evaluation exercise, and this is why they are not presented in this report.

In other words, the data are not robust enough to be consolidated. What we know is the fact that camps were held on a bimonthly basis during most of the duration of FXBV2, but less frequently in the last year as health had improved. This was confirmed by PIMS. The population of FXBV2 was fully covered, as confirmed during interviews with beneficiaries. The camps also benefitted the residents of neighbouring villages as PIMS’s camps are opened to all. Health/hygiene training sessions were held during camps and were attended by hundreds of individuals over the last three years, but we cannot conclude on the exact number of individuals who benefitted from the sessions.

⇒ **LESSON LEARNED (LL7).** Clarity and consistency in the definition of indicators and the reporting of quantitative data is a condition to the consolidation and the analysis of data. The same reporting methodology and level of rigour must be maintained across progress reports and it is important to always report on progress for the reporting period and progress to date (i.e. cumulative data from the beginning of the project) side by side so that comparisons can be easily made from one reporting period to the next and potential mistakes or inconsistencies easily spotted.

- **Access to health care: opportunities.** The number of health care facilities is the same as it was before the implementation of FXBV2. There is a (public) Primary Health Centre (PHC) in Kalapet: the PHC is in PUT, therefore not supposed to treat patients from Tamil Nadu, but people from the villages covered by the FXB programme in Tamil Nadu prefer to go to this PHC because it is close and easily reached by public transportation. The fact that this PHC is run by PIMS (a private institution focused on vulnerable families) on behalf of the government certainly facilitates the access to health care of vulnerable rural families living in Tamil Nadu, including those living in MCC and MPC. Otherwise, people go the public hospital in Tillapuram (15 km away from Mathur), also accessible by bus. On the private side, the main institution is PIMS. It has a large medical college that generates enough revenue to fund a charity in line with its vision, i.e. “to reach the unreached”. From April 2015 to March 2016, PIMS dedicated INR 110 million (about € 1.5 M) to free treatments for poor patients, most of them living in the neighbouring villages/PRIs. The charity funds increased to INR 160 M (about € 2.2 M) in the current fiscal year. PIMS is located in PUT but borders

the district of Villupuram in Tamil Nadu (see the Google Earth screenshot at the beginning of the report). Besides it is not a public hospital, i.e. it can take patients from Tamil Nadu. Since NGOs help mobilize people for camps/clinics, PIMS is always keen to work in areas where NGOs have a good presence. It currently runs 2 evening clinics every night (except on Sundays), including one evening clinic in Nesal (FXBV3) to reach out to women and children after their day of work/class. These clinics are opened to all, not just the residents of the village where the clinic is taking place. Besides, patients attending a camp are given a PIMS card (no expiry date, this is not a medical insurance policy), which is a pass for free consultation and treatment at PIMS. They are also provided with the mobile number of the PIMS doctor, who organizes the camps and clinics. On the paper, this all bodes very well for the sustainability of access to health care for people living in Mathur colonies (MCC and MPC).

- **Access to health care: constraints.** In reality, things are a bit more complicated. Though Nesal is very close to MPC and MCC (it is located respectively 5 km and 3 km away from these two villages by road), people from MPC and MCC do not go to the evening clinic: this requires biking or walking (few people have a motorcycle and many cannot afford private transportation), which is obviously a lot when one is sick. Similarly, though PIMS is a couple of kilometres away from MPC as the crow flies, to reach PIMS through public transportation is not straightforward: first they must go to Kalapet, then to Kanakachettikulam, then to PIMS, which makes the trip eventually too expensive and time consuming, according to the beneficiaries. In the end, they go to PIMS only for emergencies. Otherwise they go to a public facility. Another issue emerged from interviews: many people in these two colonies are not informed of the evening clinics held in Nesal, though the clinics are opened to all and though the president of the Mathur PRI is aware of the activity. Or could it be that they are informed and pretend they do not know about it to avoid explaining why they avoid seeking treatment when they are sick? Indeed, complex factors underpin health-seeking behaviours. What people want -this is confirmed by PIMS- is a regular medical presence at their doorstep, be it a health camp or a local doctor. For the beneficiaries, the end of the project (FXBV2 and FXBV1) meant the end of a regular medical presence. The last medical camp held by PIMS in Mathur was on 22/02/2016. The government organizes campaigns but these are typically associated to a risk and a particular disease (e.g. dengue), i.e. not for general health. The project coordinator of the PIMS camps (he organized all the camps under FXBV1 and FXBV2 and he now runs the evening clinics in Nesal) said Mathur residents do not come to the evening clinics in Nesal and do not call him. Another key factor driving health seeking behaviour are health-related costs. Even though the treatment in PIMS is supposed to be free for those who have a PIMS card delivered during the camps, the treatment is rarely entirely free (though PIMS staff keeps saying it is): some procedures have a cost, and even though poor patients get a rebate, once they go to PIMS, they can never anticipate how much they will end up paying. Therefore, they tend to avoid PIMS and stick to public facilities, which are entirely free but overcrowded.

⇒ **RECOMMENDATION (R11).** FXBIS should systematically inform the population of both Mathur colonies of the health-related events held under the new FXB project. Informing the members of the CLGs is an easy way to spread the information to MPC residents. FXBIS must find an effective way of informing MCC as well, perhaps through children attending evening classes.

4.3. The impact of health-related activities

- **Intangible achievements.** Beneficiaries confirm they better understand the diseases, the importance of early diagnosis, the importance of properly following a treatment, as well as preventive measures: there was a strong need for them to develop a knowledge and understanding of how to approach health-related issues and break with taboos: this need has been met. This major achievement is a strong factor of empowerment and is sustainable because this is an intellectual (intangible) benefit cannot be taken away. In 2015, FXBIS measured the values of two health indicators and compared them with baseline values for residents of MPC: “cases of diarrhoea in children under five in the past month” went from 25% to none and “cases of severe cough in children under five” went from 8% to none.

- **Tangible achievements.** Since the end of the intervention, no more surveys were conducted in MPC. However, PIMS students conduct regular studies in the field to monitor the health situation, including in Villupuram district where PIMS is very active. According to a professor in the Department of Community Medicine, the incidence of cholera has decreased where toilets have been installed. Where children are

actively involved in promoting hygiene (some children claim they taught their parents to use soap), their attitude plays a role in preventing diseases. Acute diarrhoeal diseases -also a cause of morbidity and mortality- have also come down. Overall, health-seeking behaviour has improved. People approach diseases with a better attitude: they no longer delay and go to PHC or hospitals; they are aware of diseases, treatments and follow-up processes.

- **Sustainability of the tangible achievements and the importance of vigilance.** One of the key benefits of a health camp is the capacity to detect illnesses early enough to prevent contagion. This facility is no longer available in Mathur where camps are no longer held by PIMS. In 2016, PIMS students conducted a study covering 12 villages in Villupuram, including Mathur: 86 patients were found to have tuberculosis, including 17 in Mathur, mostly residents of the Dalit colonies, hence at a high risk of contagion. PIMS students found out that some cases of tuberculosis were already known, including people whose treatment was completed and others who had defaulted on treatment. Even though health seeking behaviours have improved, vigilance is a must because critical health issues have not entirely disappeared in the targeted areas.

⇒ **RECOMMENDATION (R12).** FXBIS should motivate PIMS to maintain a minimum presence in MPC and MCC through camps organized in Mathur, twice a year if possible. And can the issue of treatment costs at PIMS be clarified for the residents of MCC and MPC or is it too confusing a subject?

- **Conclusion.** A number of evidences point to a substantial and sustainable improvement in the health of the targeted population under FXBV2: 1/ the project has addressed the causal factors related to illnesses through a combination of preventive (awareness), curative (medical camps) and promotive (toilets, drinking water in schools, boiling water at home) measures; 2/ surveys conducted by PIMS in Villupuram confirm the improvement; 3/ during interviews, beneficiaries confirmed a better knowledge and understanding of diseases; 4/ better income have translated into better nutrition (more vegetable). On the negative side, people have expectations, which cannot be met: once the local medical presence (regular camps) is discontinued and even though they have access to health care facilities, people are not as proactive about their health as they should. It is not because they know that they should seek medical support that they do so: distance and the fear of medical costs negatively influence health-seeking behaviours. Besides, as explained under the section on IGAs, health remains a factor of vulnerability, evidenced by the fact that some IGAs (at least two examples in FXBV1, one under FXBV2) had to be abandoned because of health issues.

⇒ **RECOMMENDATION (R13).** In the land of Ayurvedism (traditional Indian medicine), the health component of the FXB programme is entirely turned towards allopathy (modern medicine). It is not for this evaluation to discuss the comparative merits of one system over the other. However, from a sustainability prospective, health-related activities underpinned by allopathy tends to make people quite dependent on the conventional health system. Is there any institution specialized in the promotion of safe traditional practices, which FXBIS could approach with a view to broaden its health-related strategy and facilitate access to health care to treat minor/common ailments?

5. The long-term contribution of the FXB programme to a better and higher education

- **Context.** Education was a key component of the intervention. Its relevance was established under the section “Relevance of the overall FXB programme and quality of the design of FXBV2”. Children from MPC and MCC have access to the public education system (there is no private school in the area): a primary school in the main Mathur village and a secondary school in Kazuperumpakkam. The secondary school also receives the students from neighbouring panchayat/villages (including children from MCC and from Nesal), therefore some of the activities organized for the secondary students also benefitted communities beyond the Dalit colonies of Mathur (e.g. awareness days). The main objective was to elevate and sustain the performances of children from vulnerable Dalit families, at a strong disadvantage regarding education. FXBIS supported and complemented the existing public education system through different activities: transporting the children to school, coaching them after class hours (especially the slow learners), helping the most deserving families with supplies (dictionary, stationary, notebooks, school bags), organizing extra-curricular activities aimed at broadening the exposure of children to culture and sports as well as issues of strategic importance (children’s rights, hygiene, health, life skills), organizing computer education for high school children. In addition, FXBIS installed a RO plant in the primary school, raising INR 40,000 for the purpose (the plant was not planned nor provisioned in the initial budget) to guarantee access to safe drinking water.
- **Reporting issues.** During the implementation of the activities, FXBIS closely monitored the situation of the children, to make sure they all benefited from the project. Attendance and grades were monitored and did improve over the course of the intervention: the final report to TF (Year 3, semester 2) claims that average attendance rates increased from 85% (baseline) to 99% (endline) for the children attending primary school and from 72% (baseline) to 98% (endline) for the children attending secondary school. Besides, for both the primary and secondary students, average grades increased from B (baseline) to A (endline). But the methodology behind these data is not explained: do these values apply to all children ever supported throughout the implementation of FXBV2 or only to children supported during the reporting period (the last semester of FXBV2), i.e. 44 primary school children (including 23 girls) and 36 secondary school children (including 18 girls)? Trying to make sense of the quantitative values related to education indicators in the progress reports is as difficult as it is for health-related data. After the project ended, the monitoring of attendance and grades was discontinued. Therefore, the assessment of the impact and the sustainability of the intervention to date is only qualitative, stemming from interviews with students, teachers and parents.
- **The impact of education-related activities, the perception of the children/students.** All children enjoyed evening classes. Most of them live in a single-room house and say the benefits are quite obvious: at home, they are constantly disturbed as they have no place to study; besides, since many mothers never went to school, children cannot get support for their homework. The purpose of the evening coaching classes was precisely to mitigate these issues. The objective was achieved and the evening classes are continuing but financially supported by another NGO “A way with you” (it is not co-funding, this is the only other NGO locally present and it specializes locally in evening classes). Elder children also enjoy computer training sessions, which -under FXBV2- were held at FXB office. According to the last progress report, FXBVI provided computer training to a cumulated 112 secondary school students from 2013 to 2015.
- **The impact of education-related activities, the perception of the teachers.** The headmistress of the Mathur primary school confirms the high value of the evening classes: better reading and writing skills, better level of interaction from the children who now finish their assignments. She can also feel the benefits from the other activities of the FXB programme: children from the Dalit communities (“scheduled casts”) come to school properly dressed, they are “neat” she says, their body is clean, they look much healthier than in the past (i.e. before the programme), attributing these changes to a better socio-economic status of the families. According to her, the diseases are less frequent and therefore the attendance has increased. A teacher at the higher secondary school, who used to be a coach for the evening classes under FXBV2 (grade VI to IX) confirms the role of the evening coach in improving the reading and writing capacities of the students as well as the legibility. The benefits, he said, were especially high for “slow learners”.

- **The impact of education-related activities, the perception of the parents.** Despite the cost of college education (at least INR 50,000/year in tuition fees for an undergraduate programme), underprivileged parents have one idea in mind: to send their children to college. This was heard from many parents during interviews. They themselves received very little if no education at all and have the ambition to send their children to college. 10 years ago, the same parents would have been satisfied if a child completed the XIIth grade or went for technical education after the Xth grade. But now, they will not settle for less than college education, a positive sign that empowerment processes are at work. They understand a college graduate has the potential to lift the entire family out of poverty and help siblings also acquire a decent education. But for a child to enter college, he/she must first pass the class XII board exams. Therefore, parents welcome any activity having the potential to bring their children closer to this goal and are striving to save money for college education. Parents are especially fond of evening coaching classes: in CK, where classes were discontinued when FXBV1 ended, women (often widows) now send their children to private tuitions, complaining about but undeterred by the cost. Consequently, parents not only value the FXB programme for its education component but also for its IGA component -which continues to strengthen their saving capacity- and for its health component, keeping their children healthy and fit for school. The dream they pursue is the “first generation student”, i.e. their child should be the first in the family to enter college. A dream fostered by the State of Tamil Nadu with a scheme aimed at encouraging children from vulnerable rural families to apply for college: the tuition fees are waved and an allowance is provided for food and hostel. According to the secondary school teacher, fees are also waved (or reduced) for private college. Below is the number of underprivileged children, beneficiaries of evening classes under FXBV1 and FXBV2 and who are now pursuing college education: these are not necessarily first generation learner and, obviously, the credit does not go exclusively to FXBIS but it is safe to say that the concerted efforts of children, parents, teachers and FXBIS staff have paid off for these children.

NUMBER OF CHILDREN SUPPORTED BY FXBIS AND NOW IN COLLEGE

Mathur Chinna Colony (FXBV1)		Mathur Periya Colony (FXBV2)	
Girls	Boys	Girls	Boys
13	11	3	4

Source: the project team, who knows each and every family, recollected who is currently in college

- **Sustainability.** Education-related activities are rightly considered by FXBIS as the cornerstone of long-term empowerment processes. It was quickly realized that they could not be stopped after the end of each project (be it FXBV1 or FXBV2) without halting the strong momentum they had triggered. Therefore, a decision was made to maintain a minimum level of funding for a few strategic activities with or without external resources. The continuation of the financial support for education-related activities is essential given that the governmental budget for schools is extremely low and cannot be tapped into. For instance, the yearly budget for the Mathur primary school (currently 95 children) is INR 15,000 (about USD 220) including INR 10,000 for the maintenance of the building (in addition, the panchayat pays for utilities). De facto, funds are so limited that the RO plant could be installed only because the headmistress agreed to pay for the maintenance of the plant from her own pocket: the filter is changed twice a year at a cost of INR 1,200 per visit. In addition, since 2010, FXBIS has been supporting the salary of a PTA teacher (Parent Teachers Association), appointed at first standard level. Annual summer camps organized every year by FXBIS at the secondary school are continuing: one was held in May 2016 (30 days). Also continuing is the transport of school children. Every day, the FXBIS office vehicle picks up children from MCC and MPC and brings them to school: the purpose is to make sure they arrive on time and save their energy for learning. Also sustainable are the computer training sessions, now held in the newly opened computer centre on the FXB campus. Under FXBV3, computer education has become a central element of the education component: classes are accessible to all students, including MCC and MPC children, at the cost of INR 300/month. The evening course (on how to use internet) lasts 72 hours, over a period of 3 months.

- **Conclusion.** The success of the education component can be measured by the continuation of a minimum level of support of FXBIS to strategic activities and by the strong demand from schools in neighbouring villages for similar support. By facilitating access to education and the acquisition of academic

skills, FXBIS maintained a desire for school and encouraged the yearning of poor rural families for higher education. And for those who could not go to college, FXBIS had a vocational training programme, whose beneficiaries are now successfully employed (outside of the project area), according to the project staff.

6. Women empowerment: the contribution of the FXB programme to gender balance and savings

- **The context.** By focusing on the economic empowerment of women (the main thrust of FXBV2) FXBIS intended to unleash potential human resources that had never been properly tapped into. Indeed, before the intervention, most women of the targeted households were unemployed. Their two main occupations were domestic chores and working for the NREGA scheme, which is not a permanent occupation. To convince women to adhere to the idea of collective activities was therefore a challenge: an individual IGA is a much easier transition for a woman whose life has always been confined to her home and immediate surroundings. Indeed, tailoring or a milch cow (examples of individual IGAs promoted under FXBV1) does not expose the woman to the outside world, whereas leaving the village every day to go and work on the FXB campus with other women, next to a poultry unit where men are also working and interacting daily with the FXB project staff was like stepping into another world. The transition from home or village-based activities to activities taking place in a dedicated workspace was not an easy one but it was encouraged by FXBIS because the NGO felt it was a tremendous opportunity for women to raise their status in their community and in their own HHs. Women (and their husbands) decided to trust FXBIS because of the positive economic outcomes they had witnessed in MCC as a result of FXBV1. None regretted their decision.

- **Gender balance.** All beneficiary women are unanimous: owing to the skills they have acquired and their positive financial contribution to livelihoods, they have gained a lot of confidence. They are no longer hesitant to step out of the village on their own (before they used to be accompanied by a male member of the family) or to talk to strangers (including men). They claim they have gained respect at both HH and community level. They explain most husbands positively respond to the new family balance and some (very few though) even contribute to duties, which used to be exclusively their own (e.g. taking children to school). Men confirmed the project has had a strong (positive) impact on the level of exposure and mobility of the women, demonstrating that their traditional resistance to women working outside of the house is fading away. Empowerment processes have been triggered and have not stopped with the end of the intervention because the economic benefits of the IGAs have been sustained for most women, even for those who work in the SNU and are still paid daily wages by FXBIS, even though the SNU is not financially sustainable. Therefore, the project can be credited for a strong contribution to a better gender balance.

- **Future challenges.** Of course, challenges remain and it is debatable whether empowerment processes will be powerful enough to overcome more complex gender-related issues. For instance, the absence of a day care centre –identified as a constraint to the economic empowerment of young women and discussed under the section on the role of IGAs on the income and livelihoods of beneficiaries– is a symbol of modern days. Young mothers want to contribute to the well-being of the family and yearn for empowerment, not just economic but also personal empowerment. However, the social resistance to shifting from an individual to a collective responsibility over young children explains why the traditional resistance to women employment is more easily exercised by men and/or mother-in-law when children are young. Therefore, young women are more under pressure to stay at home than older women. While the support to young mothers is gaining momentum in India in the organized sector, most working women are employed in the unorganized sector and the rural areas are far behind on this front. The “Anganwadi” centres (an old central government scheme) do not respond to the needs of working women: they cater to pre-school children but the main objective is to combat malnutrition. Besides, owing to the poor overall governance of the anganwadi scheme, many women do not consider these centres as a viable alternative to a proper day care centre.

- **Self Help Groups and savings.** The collective dimension of the IGA component has been translated into Common Livelihood Groups (CLGs), which have nothing to do with SHGs (savings groups). For the sake of clarification, these are two different structures. All the members of the coir CLG and all the employees of the SNU (the group formed by the 9 women working in the SNU cannot be called a CLG, as it has no

autonomy of its own) belong to a SHG but not all SHGs members are involved in collective activities promoted by FXBIS. There are 5 active SHGs in the Dalit colonies of the Mathur panchayat (3 in MCC and 2 in MPC, each having between 15 and 20 members). They existed before the FXB programme started in Villupuram (the two SHGs in MPC were formed in 2005 and 2006), they have their own dynamics and are registered with the Tamil Nadu Corporation for the Development of Women, under the Rural Development and Panchayat Raj Department. They are also part of a Panchayat-Level Federation (PLF) of 12 SHGs (the 5 SHGs from the Dalit colonies plus 6 SHGs from the main village of Mathur) and they all operate independently from the FXB programme. Apart from the fact that the FXBIS team successfully promoted the concept of a PLF of SHGs (the PLF was formed during FXBV1), FXBIS has played no role in the development of the local SHGs. Nevertheless, since SHGs are known to contribute to women empowerment, it is interesting to examine whether the project (and more generally the FXB programme) has had any indirect impact on the level of savings and transactions by local SHGs. Typically, women have been contributing INR 100/month to their SHG: this was confirmed by beneficiary women in MPC as well as in MCC, who explained the monthly contribution has been stable over the years, i.e. not influenced by a change in their income. However, they also said they are able to repay the loans they take from their SHG more easily because their income has increased as a result of IGAs, collective or individual. Conclusion: by strengthening the financial situation of the women, the project indirectly strengthens the sustainability of the SHGs. Another positive change is the establishment of the PLF, which gives SHGs access to substantial subsidized bank loans (from INR 60,000 onward), which are used as revolving funds: the SHG splits the bank loan into smaller loans, which are disbursed to women on a priority basis. Besides, every year, one member of each SHG is entitled to receive a loan from the PLF, which must be repaid within the year. Though no survey has been conducted on the benefits of the PLF in Villupuram, it is fair to say that this federal mechanism has been a key factor of development because it has boosted access to credit for the target population. Even more positive is the fact that the first use for micro-credit is the technical and/or higher education of children. The acquisition of productive assets comes next, then medical expenses, family functions and house construction.

- **Parallel savings mechanisms.** Having said that, the above clarification between CLGs and SHGs was prompted by the (confusing) fact that the women involved in collective IGAs have also engaged in parallel (but useful) saving mechanisms. Indeed, a group of 16 women, comprised of individuals working in the coir unit and in the SNU, joined hands in February 2014 to form a chit fund. By this mechanism, each woman contributes INR 1,000 per month and the fund raised each month (INR 16,000) goes to one of the women, typically the one in dire need of money (emergency needs). The length of the chit fund is proportional to the number of women, i.e. 16 months. It is obvious that the monthly contribution to the chit fund (INR 1,000) is huge, in comparison to the average monthly income they earned from the collective IGAs in 2016: INR 850 for the SNU and 1,323 for the coir unit. This suggests women from the SNU also contributed some of the wages they earn from NREGA (because they earned less from the SNU than their monthly contribution to the chit fund). How do they achieve this level of savings? The response from the women was unambiguous: we save our entire salary so that men do not take it!

- **Conclusion.** The contribution of the FXB programme to the economic and personal/psychological empowerment of women in targeted communities of Villupuram is significant and leads to many tangible benefits: a better gender balance, increased confidence among women, stronger SHGs, higher savings. Let us note that empowerment processes have been very well described in a study conducted by two Harvard students who came as interns for a few weeks during Summer 2016.

7. The role of the government and the space for FXBIS in Villupuram

- **Introduction.** India has a very strong civil society and NGOs play a significant role in both urban and rural areas of India. Depending on schemes and policies developed at both State and central levels, the space for NGOs may vary. For instance, the huge rural public works programme known as NREGA has no space for NGO: in the field, this national scheme is currently piloted by the PRI of Mathur. In Tamil Nadu, the space for NGOs has been mechanically restricted by the myriad of welfare schemes developed under the rule of the late Chief Minister, who dominated the political life for about three decades and passed away in December 2016. De facto Tamil Nadu ranks better on the development scale than many other States in India, because the schemes have reached the people, targeting different categories of citizens. The following is not an exhaustive list of areas where the government plays a role but merely examples of convergence and complementarity between governmental agencies and FXBIS in Villupuram.
- **Sanitation and housing scheme.** One of the basic roles of the NGO is to help vulnerable individuals and HHs access the multiple governmental schemes available for different categories of citizens, which is what FXBIS has been doing: the team has been involved in helping several HHs living below the poverty line in MPC avail themselves of a Tamil Nadu rural housing scheme called the “Solar Powered Green House Scheme”, which are also equipped with toilets. Similarly, most toilets constructed under FXBV1 were done under the central level “Total Sanitation Campaign” (Nirmal Bharat Abhiyan) initiated by the Government of India in 1999 and whose objective was to end the practice of open defecation in rural areas. The campaign ended in 2012 and was resumed in October 2014 under a new name “Clean India Mission” (Swachh Bharat Abhiyan) but new rules made it impossible for the project team to obtain governmental support under FXBV2.
- **Health and Education.** In the areas of health and education, the role of the government is to implement national and state-level schemes in rural Villupuram. The education component of the FXB programme comes in support to the National Education Mission (Sarva Shiksha Abhiyan) whose objective is to universalize elementary education in the country. Mathur has an elementary school and the neighbouring PRI has a secondary school, very close to Mathur. Therefore, the role of FXBIS has been to facilitate access to school for the poorest children by providing school equipment and evening coaching classes, which parents are fond of as it helps children with their homework, focus on studies and prevents them from wandering the village aimlessly after school hours. As far as health is concerned, the role of FXBIS has been more prominent because there is no primary health centre in the immediate vicinity of the targeted communities. The health camps organized by PIMS have filled the gap with the aim of improving health-related behaviours. At community level, the government is nevertheless present with one Accredited Social Health Activist (ASHA), i.e. a community health worker at panchayat level whose role is to enlist pregnant women who get covered for their deliveries (a governmental mechanism). The ASHA reports to an Auxiliary Nurse Midwife, who is the interface between communities and governmental schemes/campaigns. Also, as part of the many welfare schemes in Tamil Nadu, the State regularly distributes rice to poor people.
- **Self-Help Groups.** The district government has also been active in inducing and strengthening SHGs: this is an old governmental programme that has its flaws and imperfections, but is sustainable. FXBIS has facilitated the grouping of existing SHGs into a PRI-level federation but cannot claim a major role in the overall dynamics of local SHGs.
- **Conclusion.** The relationship between the local government and FXBIS is good, the former is aware of the activities of the latter, convergence is sought by FXBIS whenever schemes permit but FXBIS mostly and rightly focuses on areas of intervention where needs are neglected such as economic development, access to health care, support to education of vulnerable children. For instance, IGAs do not compete with NREGA because NREGA has nothing to do with an IGA: it helps the most destitute survive by guaranteeing 100 days of work to every adult of a rural HH, while well-designed IGAs have the true potential to lift people out of poverty. This is something the assistant village administrative officer (tax collector at PRI level) readily acknowledges when he talks about the impact the FXB programme has had on the population. In other words, for the benefit of the population, FXBIS has carefully avoided duplicating the role of the government, rather it has been striving to complement and add value to the governmental action locally.

8. From implementing partner to stakeholder: the role and sustainability of FXBIS in Villupuram district

- **Background.** As an international NGO, FXB has been present in India since 1991. FXB India Suraksha (FXBIS) was established as an autonomous Indian entity in 2007. The programme in Tamil Nadu was therefore started by FXBIS and the local team grew with it, both quantitatively and qualitatively: comprised of two full-time staff under FXBV1 and four full-time plus one support staff under FXBV2. It now has a core staff of eight individuals. Besides the team was and is still assisted in its field work by volunteers recruited in targeted villages and receiving honorariums: as an interface between the beneficiary communities and the FXB programme team, they facilitate the implementation of activities. There is also evidence that FXBIS has strived to incorporate people from the target communities into its team, not only contributing to improving its understanding of the local context but also to anchoring its local presence and credibility: the field coordinator is from Kalapet, the driver is from MPC, the person in charge of overseeing the collective IGAs was a beneficiary in CK, the outreach worker and the computer trainer are from Nesal. While its operational capacity has been built on a mix of external and local skills, the FXBIS team in Villupuram has also become more professional: tasks were reorganized with specific coordinators for each component, FXBIS has developed relations with the local authorities (Block Development Office, District Rural Development Agency, Tamil Nadu Women Development Corporation). Moreover, the number of linkages with other NGOs and civil society organizations in Tamil Nadu has increased over time: Coir Board Society, Tamil Nadu Poultry Farmers Association, Pondicherry University, Pondicherry Institute of Medical Sciences. FXBIS is also a member of the Inter Agency Group (IAG) a consortium of civil society organizations focused on reducing disaster risk in Tamil Nadu. FXBIS has trained villagers for disaster preparedness. The head of the Social Work Department of the Pondicherry University confirms FXBIS has a strong presence and visibility locally, which makes it a partner of choice for other stakeholders, including governmental agencies.
- **Emergency support.** The handling of the crisis of the Thane Cyclone in the last days of 2011 also marked a new step for FXBIS in Villupuram. As mentioned earlier, the NGO was fast to distribute much needed first necessity items and it also paved the way for more efficient governmental relief operations by assessing the needs in the wake of the damage. 6 years have passed but this is often the first thing that comes to people's mind when asked about the benefits brought in by the programme: the precious support has not been forgotten and it did help forge a special link between the Dalit communities and FXBIS. As mentioned under the "design" section, the quality of the relationship between FXBIS and the beneficiaries also stems from the small scale of intervention: the programme was designed to be implemented in one village at a time (CK was added to MCC to reach 100 beneficiary HHs, which was a commitment), allowing for the team to develop a trustful relationship with all targeted HHs.
- **From implementing partner to stakeholder.** When FXBV2 started, FXBIS knew from past experiences and from a preliminary survey in MPC that it would be impossible to physically develop collective IGAs in the very villages where Dalit communities live: the fact that the targeted families were landless coupled to the highly prohibitive cost of the land made it impossible for the newly formed CLGs to secure a piece of land where to set up a poultry unit, a coir unit and a sanitary napkin making unit. Fully committed to reaching the objective and contributing to the livelihoods of HHs in MPC as per its initial plan (i.e. the collective approach) FXBIS made the decision to acquire a piece of land. In June 2013, FXBIS purchased – with its core funds- a piece of land in Villupuram district, close to MCC, MPC and Nesal (the latter being the village whose population is targeted under FXBV3). The purpose was to assist the beneficiaries in setting up social enterprises, hence the land was acquired with the understanding that it would be dedicated to the beneficiary communities of the FXB programme. Both the poultry unit and the coir unit were subsequently set up in the premises of the "campus". Besides, the sanitary napkin unit was installed next to FXBIS office (about a kilometre away from the campus, see the Google Earth snapshot). By doing so, FXBIS went one very strategic step ahead: its operation in Villupuram became intricately linked to the collective IGAs. In short: FXBIS is no longer a typical grass-root NGO, it has become a key stakeholder. This deliberate and informed choice of FXBIS is an evidence of a long-term strategy in Villupuram. Indeed, the idea is to have a

place where trainings can take place, with a view to further stimulate and demonstrate how to develop social enterprises. Since the coir unit and the poultry sheds were built, the campus has also been used to set up a computer training centre and will also have a garment centre. Besides a few individual IGAs are conducted in the premises: a guard is on duty, and 3 women have opened a small road-side eatery, catering to passers-by, FXBIS and/or visitors.

⇒ **RECOMMENDATION (R14).** As a stakeholder, FXBIS de facto offers a level of protection to the activities taking place on the campus that is atypical, i.e. it is beyond the role of a typical NGO. There is a risk (and this is only an assumption) that FXBIS might consider -unconsciously- that this protective role is a form of compensation for the absence of institutional sustainability of the CLGs created under FXBV2 (or any CLG to be created on the same model). In which case, the risk would be to neglect the need for the institutional strengthening of the groups, provided this is what the groups want and provided they are given a chance to understand the pros and the cons of building their institutional capacity in the current administrative context. The recommendation is for the management to acknowledge and discuss the risk (or to dismiss it, if this assumption proves wrong).

- **Prospective sustainability of FXBIS in Tamil Nadu.** This strategic choice (i.e. the establishment of the campus) has consequences: activities conducted on the campus are now tied to the very presence and sustainability of FXB in Villupuram. One cannot doubt the commitment of FXBIS in Tamil Nadu is very strong: it has an expansion plan for at least another 5 villages. But de facto, the sustainability of the programme has become more critical than ever, now that IGAs are located on the campus. Besides, core funding is required to continue the implementation of common minimum activities, such as education. And since the campus is very small, the local growth of the organization is bound to require more space in the future (i.e. more costs). On the positive side, FXBIS strives to recoup some the costs of the IGAs: 1/ both the poultry and the coir units are sustainable and pay INR 1,000/month to FXBIS (these payments are called “royalties”); 2/ the coir unit also pays for utilities as most of the electricity utilized on the campus is for the manufacturing of coir rope (poultry is an agricultural-related activity, for which electricity is free); 3/ FXBIS charges a fee for computer trainings (INR 300 per child per month); 4/ The campus is equipped with a guest room, which can be occupied by the programme’s guest at the rate of INR 100/day; 5/ FXBIS organizes paying trainings (Entrepreneurship Development Program) and exposure visits; according to the final progress report, 200 women entrepreneurs from Tamil Nadu and South India had been trained on the campus since it was developed; 6/ Vermi-compost is made on the campus with at least 3 batches of compost sold every year (@ INR 1500/batch). However, once a project is over, FXBIS is mostly on its own when it comes to continue supporting an activity that is not sustainable (education, the SNU), even though it has demonstrated a capacity to attract additional funding in the past: for instance, under FXBV1 and FXBV2 each camp organized by PIMS was worth INR 20,000; under FXBV1, FXBIS partnered with a vocational institute and trained several youths, each training being worth INR 15,000; funds from the Fondation ELLE helped set up the SNUs; funds were raised from individuals to set up a RO plant in Mathur’s primary school to secure access to safe drinking water for children. Neither the SNU nor the RO plant were in the initial design of the projects supported by TF but their implementation boosted the economic and health-related effectiveness of the FXB programme, which must be assessed as a whole: indeed, co-funding has brought significant value to the core activities of the FXB programme. However, it is one thing to attract additional funds for a project, which is already financially secured (the main support for FXBV1 and FXBV2 was from TF) and another to raise funds to sustain benefits stemming from a project that has officially ended. All external funds for the FXB programme in Tamil Nadu are directed to new projects, i.e. they are not meant to sustain benefits from past projects: 1/ in Nosal, FXBV3 is funded by a French NGO “Pour Eux” from 2016 to 2018; 2/ Whirlpool is funding an “Integrated Community Development Programme” in two villages of PUT from 2015 to 2018, under its CSR programme. Under the Companies Act (2013, came into effect on 01/04/2014), large Indian companies (as measured by their net worth, turnover or net profit) must engage in CSR activities. This is a new opportunity for FXBIS to raise funds in India, but the NGO nevertheless points at persistent issues that will not go away with CSR funds: it is hard to raise funds 1/ to sustain strategic activities whose benefits are not financially sustainable, 2/ to support the Delhi-based programme staff which manages, coordinates and backstops all field operations and 3/ for advocacy-related activities.

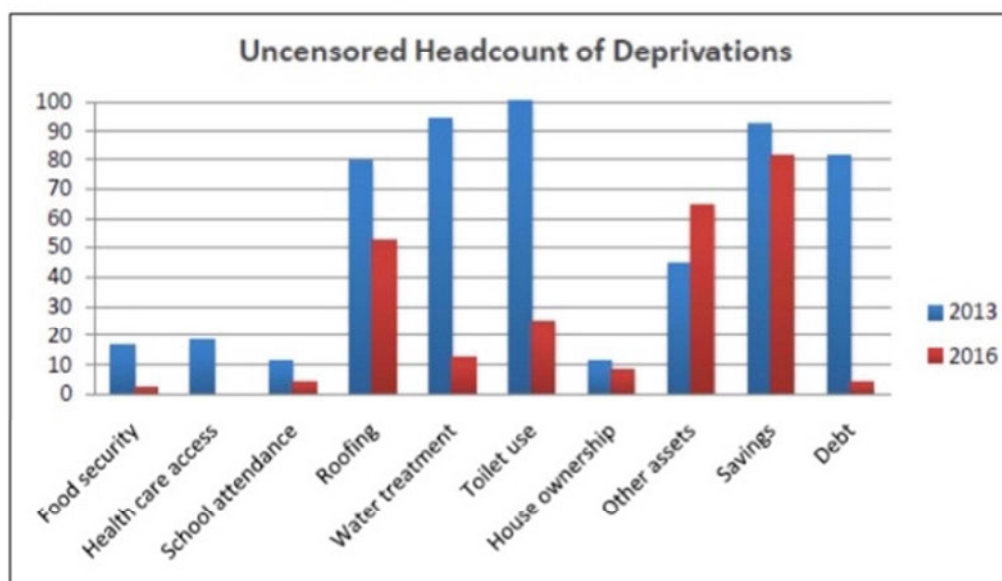
CONCLUSION

• **A multidimensional poverty analysis of FXBV2 in 2016.** FXBIS rightly argues that the income-based poverty line (updated at USD 1.90 /person/day by the World Bank in October 2015, up from USD 1.25, which was in the international poverty line in use since 2008) is too simplistic an approach to poverty assessment. Better income is obviously closely associated to better nutrition and housing but the poverty line methodology does not take into account the tangible value of many poverty-related indicators, which are not easily translated in monetary terms such as access to education, health, sanitation, safe drinking water. Besides, the levels of debts, savings, assets are important indicators of the potential resilience of vulnerable families, but these are not captured by the measurement of the income. In other words, FXBIS felt that it needed a multidimensional poverty analysis of the beneficiary households to properly assess the benefits of its integrated rural development programme in Tamil Nadu. In May 2016, using the Alkire Foster method developed under the Oxford Poverty and Human Development Initiative, FXBIS conducted a multidimensional poverty analysis of the beneficiary households of FXBV2 and assessed the changes in values for 10 indicators across 7 areas of intervention (number of meals per day, access to health services, school attendance, water treatment, toilet use, roofing, house ownership, other assets, savings, debts) between 2013 and 2016 (no such analysis was done for FXBV1). Because of “data limitations”, income was not included as an indicator in the multidimensional poverty analysis: instead financial security was assessed through savings and debts. The Alkire Foster method is a flexible approach, which lets the analyst select the number and nature of areas of intervention (i.e. the domain or dimension, for instance WATSAN or financial security), the indicators within each dimension (e.g. water treatment, toilet use in the WATSAN domain) and for each indicator a poverty cut off (e.g. no water treatment, no improved toilet facility or open defecation), below which a person is considered deprived in that indicator. Deprivations are weighted, counted and added to identify who is poor and who is not. A second poverty cut off is applied: “the number of indicators in which a person must be deprived to be considered multidimensionally poor” (<http://www.ophi.org.uk/>). Then, the proportion of poor people (the headcount) and the intensity of the poverty (average poverty gap) are calculated to form the Multidimensional Poverty Index (MPI).

• The main conclusions of this 2016 poverty analysis are as follows and further illustrated in the chart on the next page:

- *“The analysis reveals that multidimensional poverty levels among the FXBVillage programme in Villupuram decreased significantly over the three-year intervention period. These results stand true not only for the MPI value but also its two components – the headcount ratio and the average intensity of poverty. The research findings also prove to be robust for all chosen poverty cut-offs.”*
- *“Comparing their multidimensional poverty levels at time of programme completion in 2016 with 2013, the beneficiary households fared better in all identified indicators but ‘Ownership of Other Assets’, such as land or livestock. Two other indicators which continued to prove problematic are ‘Roofing’, as an indicator for housing quality, and ‘Savings’, as an indicator for financial security. While the former can be led back to natural calamities at the end of the programme intervention period, the latter can almost certainly be accounted for by a definition obscurity during field data collection.”*
- *“The impact assessment revealed that the FXBVillage Villupuram intervention had an especially strong impact on alleviating WATSAN-related deprivations in terms of toilet use and drinking water treatment as well as on decreasing outstanding household debts. Additionally, at the end of the programme period in 2016, no household reported to be deprived in its access to health care facilities.”*
- *“All things considered, the impact assessment findings are remarkable positive. The analysis of multidimensional poverty among the FXBVillage household beneficiaries in Villupuram reveals that the households are significantly less poor in 2016 compared to 2013. It can therefore be concluded that the FXBVillage programme profoundly increased the living quality of its beneficiary pool in Villupuram village over the course of the last three-year intervention period.”*

Figure 2 Percentage of Households Deprivations for each Indicators



Source: FXBVillage Villupuram - Project End Line Evaluation, May 2016, page11 (FXB international)

- The ex-post evaluation confirms but nuances the findings of the poverty analysis.** The objective and scope of the independent ex-post evaluation commissioned by TF differs from the poverty analysis carried out in May 2016. So does the methodology, inspired by the MSC technique, which is strictly a qualitative method. However, the evaluation took place a year after the end of the project and did provide an opportunity to confirm the benefits assessed by FXBIS and determine whether these were sustainable or not. Besides the evaluation analysed the factors, which underpin the performances and sustainability of the collective IGAs developed under FXBV2, allowing for a better understanding of the opportunities and risks attached to the continuity of the project benefits. The main findings stemming from the multidimensional poverty analysis are confirmed by the ex-post evaluation. As mentioned, the benefits in terms of sanitation are highly valued by the beneficiaries and water-borne diseases have decreased owing to better awareness of hygiene and water treatment. The above table explains why the changes are so dramatic for the beneficiaries: 100% of the HHs were deprived of toilets before the project started and more than 90% did not use any form of water treatment. This is a very positive and lasting impact. The improvement in the domain of food security -also confirmed by the evaluation- is more the result of a better income and distribution of food items than the development of kitchen gardens, which proved rather unsustainable. Hence the importance of sustained income levels: the incomes from the coir unit are sustainable, so are those from the poultry unit provided production is better monitored and no major disaster (disease outbreak, cyclone) strikes the project area; however, the incomes of the sanitary napkin unit considerably dropped during 2016. It is also confirmed that better incomes have contributed to repaying some of the debts contracted with money lenders at high interest rate, and this is a major achievement for the beneficiaries: less than 10% of the persons interviewed confirmed they had outstanding debts in 2016 against about 80% in 2013. Time is the essence of development processes and debts must be repaid before savings are made. This process has been rather slow for the targeted population: the poverty analysis shows the number of HHs without savings has declined between 2013 and 2016, but not drastically. However, saving habits have continued to improve in 2016 and the number of HHs without savings would probably be lower if was to be assessed again in 2017. As far as health and education are concerned, the evaluation is more nuanced than the poverty analysis. A year after the end of the project, disease awareness is still there and preventive measures are still observed but access to health care has not drastically improved as health camps have moved on to other villages. Similarly, school attendance has certainly improved but the indicator of the poverty analysis is a bit restrictive and does not measure the true contribution of the FXBIS intervention, i.e. an improvement in the performances of the students and better long-term perspective in terms of education. In other words, there is more to the FXB programme than an impact on poverty: long-term mechanisms (savings, education) and empowerment processes are expected to help people stay away from the grips of poverty.

ANNEXES

Annex 1 – Documents reviewed

- 2016 FXB Village Global Logframe
- Related to FXB Village 1
 - Project proposal “ FXB-Village Villupuram, India Global Fight against AIDS and Poverty: Development of Sustainable Social and Economic Independence of 80 families through Education, Health and Income Generating Activities”, 2009, 19 pages, FXB International
 - Summary Progress Report (January to June 2010), 9 pages
 - Summary Progress Report (January to December 2010), 18 pages
 - Summary Progress Report (January to July 2011), 22 pages
 - Summary Progress Report (July to December 2011), 12 pages
 - Summary Progress Report (January to July 2012), 11 pages
 - Summary Progress Report (January to December 2012) and Final Results, 14 pages
- Related to FXB Village 2
 - Project Proposal - Related to FXB Village 2 (FXB-Village, Mathur Periya, Villupuram, Tamil Nadu, India) Transforming poor rural women into successful entrepreneurs, June 2012, 18 pages, FXB International
 - Progress Report (January - June 2013), 19 pages
 - Annual report (January – December 2013), 22 pages
 - Progress Report (January - June 2014), 22 pages
 - Annual Report (January - December 2014), 22 pages
 - Progress Report (January - June 2015), 24 pages
 - Project completion Report (January 2013 –December 2015), 16 pages
- FXBVillage Villupuram - Project End Line Evaluation, May 2016, 16 pages, FXB international
- “Brand Amma, the mother of welfare schemes” The Hindu (daily newspaper), December 6th, 2017
- Log books: attendance of beneficiaries to the different collective income generating activities, monthly
- Prevalence of chest symptomatics and pulmonary tuberculosis among adults in rural areas of Villupuram district – PIMS, Department of Community Medicine, ROME posting report 2016 (Student batch 2013 – Group B).
- Draft of the “Impact Assessment of the Livelihood Programs of FXBIS Tamil Nadu, Apoorva Rangan Austin Valido”, July 2016, 22 pages (interns from Harvard)
- Impact Evaluation of Rural FXBVillages & Proposal for Development of Urban FXBVillage. Cindy Lin & Hanna Otani (September 30, 2015) - In partnership with the FXB Center for Health and Human Rights at the Harvard T.H. Chan School of Public Health (46 pages)

Annex 2 - Schedule of the Field Phase from 05 to 21 December 2016

Evaluation of FXB Programme in Tamil Nadu (Village 1 - 2010/2012 & Village 2 – 2012/2015)

Day	Details	Location
28/11/2016	Briefing on Tamil Nadu programme by staff FXB India Suraksha	New Delhi
Day 1 Monday 05/12/2016	Interaction with FXB staff and presentation of the village 1 & 2 programme (FXBV1 & FXBV2)	FXB India Suraksha office (FXBIS), Kazuperumpakkam
Day 2 Tuesday 06/12/2016	Interaction with FXB staff on all collective IGAs (FXBV2)	Pondicherry (unable to go to the field due to the death of a key local political figure)
	Interaction with the programme staff on the various national/state schemes (FXBV1 & FXBV2)	
Day 3 Wednes. 07/12/2016	Individual interaction with one beneficiary (FXBV1)	Mathur Village
	Interaction with 23 children of all ages, who attend the evening coaching classes (FXBV2), with the teacher of the coaching center (FXBV2)	Evening coaching center in Mathur Periya Colony (MPC)
	Visit of FXB campus, including Poultry Unit and interaction with students of the internet school (FXBV2)	FXB Enterprise Campus near Kazuperumpakkam
	Observation of Evening Clinic and interaction with clinic coordinator (FXBV1 & FXBV2)	Nesal Village
Day 4 Thursday 08/12/2016	Individual interactions with 4 beneficiaries (FXB V1)	Mathur Chinna Colony
	Visit of Sanitary Napkin Production Unit (FXBV2)	Sanitary Napkin Unit located in FXBIS office, Kazuperumpakkam
Day 5 Friday 09/12/2016	Collection of raw socio-economic data on the Sanitary Napkin Unit and interaction with programme staff on the subject (FXBV2)	FXBIS office, Kazuperumpakkam
Day 6 Saturday 10/12/2016	(continued) Collection of raw socio-economic data on the Sanitary Napkin Unit & interaction with FXB staff (FXBV2)	FXBIS office, Kazuperumpakkam
	Interaction with women working in Sanitary Napkin Unit (FXBV2)	FXBIS office, Kazuperumpakkam
	Review and synthesis of office logs regarding the expenses for the poultry from the start until last batch (FXBV2)	Pondicherry
Day 7 Monday 12/12/2016	Interaction with the poultry farm beneficiaries (FXB V2)	Mathur Periya Colony (MPC)
	Interaction with individual beneficiaries of eatery (FXBV2)	FXB Enterprise Campus
Day 8 Tuesday 13/12/2016	Individual stakeholder meetings with medical staff from different departments (FXBV1 & FXBV2)	Pondicherry Institute of Medical Sciences
	Collection of raw socio-economic data on the Coir unit and interaction with programme staff on the subject (FXBV2)	FXBIS office, Kazuperumpakkam
Day 9 Wednes. 14/12/2016	Observation of Coir Rope Manufacturing Unit (FXBV2) and group interaction with women entrepreneurs	Coir Rope Manufacturing Unit, FXB Campus
	Interaction with the headmistress on Education Support Programme (FXBV1 & FXBV2)	Mathur Primary School
	Interaction with Mathur Panchayat President (FXBV1 & FXBV2)	Mathur Periya Colony
Day 10 Thurs. 15/12/2016	Individual interactions with 7 beneficiaries (FXBV1)	Chinna Kalapet, Pondicherry
	Group meeting with IGA beneficiaries (FXBV1)	Mathur Chinna Colony
Day 11 Friday 16/12/2016	Meeting with poultry supplier/buyer (FXBV2)	Kalapet
	Group meeting with beneficiaries not involved in collective IGA (FXBV2)	Mathur Periya Colony
Day 12 Satur. 17/12/2016	Meeting with teacher at higher secondary school (FXBV2)	Kazuperumpakkam, Villupuram district
	Meeting with Village Administration Officer (FXBV1 & FXBV2)	Mathur Village
	Review of documentation provided by FXB staff (FXBV1 & FXBV2)	Pondicherry
Day 13 Monday 19/12/2016	Group interaction on manual coir unit & SHGs (FXBV1)	Mathur Chinna Colony
	Individual interaction with person appointed by the government to monitor all Mathur SHGs (FXBV1 & FXBV2)	Mathur Chinna Colony
	Interaction with FXB staff on SHGs (FXBV1 & FXBV2)	FXBIS office, Kazuperumpakkam
	Visit to Pondicherry University and individual interaction with stakeholder (FXBV1 & FXBV2)	Pondicherry University
Day 14 Tuesday 20/12/2016	Individual interaction with one Person Living with HIV AIDS (FXBV1)	Chinna Kalapet
	Final interaction with FXB programme staff (FXBV1 & FXBV2)	FXBIS office, Kazuperumpakkam
Day 15 Wednes. 21/12/2016	Final interaction and debriefing with FXB India via skype (FXBV1 & FXBV2)	Pondicherry

Annex 3 - People met & interviewed during the field phase

Evaluation of FXB Programme in Tamil Nadu (Village 1 - 2010/2012 & Village 2 – 2012/2015)

FXB STAFF IN NEW DELHI AND TAMIL NADU		
Mamta Borgoyary	Chief Executive Officer	FXB India Suraksha, New Delhi
Swati Chakraborty	Head of Monitoring & Evaluation	FXB India Suraksha, New Delhi
V.S. Yuvaraj	Programme Officer & State Coordinator	FXB India Suraksha, Tamil Nadu
D. Carounagarane	Field Coordinator	FXB India Suraksha, Tamil Nadu
S. Raj Kumar	Social Worker	FXB India Suraksha, Tamil Nadu
S. Raja	Accountant	FXB India Suraksha, Tamil Nadu
B. Ayyanar	Outreach Worker	FXB India Suraksha, Tamil Nadu
E. Anbarasi	Computer Trainer	FXB India Suraksha, Tamil Nadu
BENEFICIARIES		
Individual meetings 5 beneficiaries: 3 women, 2 men	Milkman & cattle rearing, 2 more cattle rearing, tailor, beautician	Mathur Chinna Colony (FXBV1)
Individual meetings 7 beneficiaries: 6 women, 1 man	Petty shop owner, 3 dhobis, 1 fish vendor, plastic utensil vendor, tailor	Chinna Kalapet Colony (FXBV1)
Group meeting 18 beneficiaries: 14 women, 4 men	Goat rearing, gym equipment, petty shop, cattle rearing, flour making, manual coir making, tailoring, garment reselling	Mathur Chinna Colony (FXBV1)
Group meeting 3 women	Women involved in manual coir making	Mathur Chinna Colony (FXBV1)
Individual meeting 1 woman	Tailor, people living with HIV AIDS	Chinna Kalapet Colony (FXBV1)
Group meeting 12 women	Individual IGAs & sanitary programme	Mathur Periya Colony (FXBV2)
Group meeting 7 women	Women working in the Sanitary Napkin Unit	Mathur Periya Colony (FXBV2)
Group meeting 23 beneficiaries 12 girls & 11 boys	Primary and secondary school students	Mathur Periya Colony (FXBV2)
Group meeting 9 men	Men running the Poultry Unit	Mathur Periya Colony (FXBV2)
Group meeting 5 women	Women running the Coir Rope Making Unit	Mathur Periya Colony (FXBV2)
Individual meetings 2 women	Eatery business on FXB Campus	Mathur Periya Colony (FXBV2)
STAKEHOLDERS		
Ms. Malarvizhi	Headmistress, Panchayat Union Primary School	Mathur
Mr. Baskar	President	Mathur Panchyat
Udit B. Das	Medical Superintendent, Head of Department of Forensic Medicine	Pondicherry Institute of Medical Sciences
Raja Selvam	Project Coordinator of medical camps & evening clinics	Pondicherry Institute of Medical Sciences
Anil Purty	Professor, Department of Community Medicine	Pondicherry Institute of Medical Sciences
Dr. Velavan	Assistant Professor, Department of Community Medicine	Pondicherry Institute of Medical Sciences
A. Elumalai	Owner of broiler farms, supplier of feed, chicks and buyer of broilers	Pritha Broilers Company
N. Rajiv Gandhi	Teacher	Government Higher Secondary School, Kazuperumpakkam
Mr. Natarajan	Assistant Village Administration Officer	Mathur
Renuka	Monitor for government recognized SHGs	Mathur
Shashin Sultana	Head of the Social Work Department	Pondicherry University

Annex 4 – Intermediate calculations for the cost analysis of the sanitary napkin unit

ESTIMATING THE AVERAGE COST (*) OF THE WOOD PULP FOR THE PRODUCTION OF SANITARY NAPKINS IN 2016, BASED ON ACTUAL INVOICES

Source: Evaluation mission based on data provided by FXB-IS

Date	Details on the purchase of wood pulp	Quantity purchased (kg)	Invoice Amount (INR)	Estimated cost of local transportation (INR) (**)	Transportation from Chennai to Pondicherry (actual invoice in INR) (***)	total cost (INR)	cost of wood pulp delivered to production site (INR/kg)
02/02/2016	Being Paid to Annai Therasa magaliar SHG for the purchase of raw material expenses 96.12 kilo wood pulp @ 45 Rs compressed	96,12	4325,00	256	300	4881	51
24/05/2016	Being Paid to Success J Garment for the purchase of pulp cotton expenses 150*47=7050/-	150	7050,00	275	0	7325	49
22/06/2016	Being Paid to Success J Garment for the purchase of pulp cotton expenses (152*60=9120°	152	9120,00	275	0	9395	62
02/11/2016	Being Bill received from success J garments for the pulp cotton and non oven material (50kg*60=3000° Material received from sep 16	50	3000,00	275	0	3275	66
23/11/2016	Being Advance to Paid to Sree sakthi health care product for the purchase of woodpulp (192*60=11520 + vat5% 576 total 12096)	192	12096,00	256	2030	14382	75
TOTAL		640,12	35591	1337	2330	39258	
AVERAGE WEIGHTED COST OF WOOD PULP PURCHASED IN 2016 (INR /kg)							61

(*) Average weighted cost

(**) When the product is sourced locally, FXB uses its own truck to get the wood pulp from Tindivanam (80 km return trip)

(***) When the product is sourced in Chennai, it is first shipped from Chennai to Pondicherry (invoice), then FXB uses its truck to pick up the pulp from Pondicherry (60 km return trip)

The cost of transportation with FXB's own truck is calculated as follows: 16 km per litre of diesel @ INR 55/litre. Sometimes, help is required for loading the pulp (+ INR 50)

PRODUCTION & SALES OF SANITARY NAPKINS - 2016 UP TO 30/11/2016

Source: Evaluation mission based on data provided by FXB-IS

(*) Napkins are referred to as 15 gr, 18 gr or 21 gr napkins, based on the net quantity of wood pulp used for their manufacturing

2016	number of pads produced	number of pads produced			number pads sold
	all types	15 gr pad	18 gr pad	21 gr pad	all types
January	1828	700	10	1118	8000
February	6872	2380	4492	0	2000
March	2130	1375	755	0	8000
April	0	0	0	0	1600
May	1745	1745	0	0	1513
June	9401	7401	2000	0	8500
July	3900	3900	0	0	3600
August	3890	1445	2445		3200
September	2880	1185	1695	0	5400
October	0	0	0	0	650
November	5998	3033	2965	0	0
TOTAL	38644	23164	14362	1118	42463
Type of napkin (*)	All types	15	18	21	
Total weight (gr)	629454	347460	258516	23478	
average weight of napkin produced	16,28853121				

Annex 5 – Intermediate calculations for the cost analysis of the coir manufacturing unit

Source: FXBIS

DATA FOR LABOUR COSTS

	no of woman-days	number of women	wage per day (INR)	TOTAL WAGES (INR)
Mar-14	93	5	100	9300
Apr-14	94	6	100	9400
May-14	81	6	100	8100
Jun-14	116	7	100	11600
Jul-14	87	6	100	8700
Aug-14	110	6	100	11000
Sep-14	130	7	125	16250
Oct-14	97	8	125	12125
Nov-14	139	8	125	17375
Dec-14	90	9	125	11250
Jan-15	47	9	125	5875
Feb-15	67	7	125	8375
Mar-15	63	7	125	7875
Apr-15	77	8	125	9625
May-15	93	7	125	11625
Jun-15	88	8	125	11000
Jul-15	114	8	125	14250
Aug-15	137	8	125	17125
Sep-15	122	8	125	15250
Oct-15	103	8	125	12875
Nov-15	70	7	125	8750
Dec-15	65	7	125	8125
Jan-16	60	5	125	7500
CUMUL	2143			253350

PRODUCTION OF COIR ROPE

	No of bobbin	Kg of coir rope	Actual monthly sales
Mar-14	155	450	14400
Apr-14	180	557	18900
May-14	202	580	22422
Jun-14	133	387	12369
Jul-14	256	784	24576
Aug-14	357	1041	38556
Sep-14	267	790	28035
Oct-14	154	441	17556
Nov-14	221	676	22542
Dec-14	218	676	24198
Jan-15	78	253	8190
Feb-15	27	88	2754
Mar-15	99	308	10692
Apr-15	282	829	26226
May-15	199	571	22089
Jun-15	65	216	7020
Jul-15	299	866	31395
Aug-15	760	2214	70680
Sep-15	542	1607	48780
Oct-15	362	1102	40182
Nov-15	6	18	576
Dec-15	5	15	465
Jan-16	6	19	648
CUMUL	4873	14488	493251

PURCHASE AND CONSUMPTION OF RAW MATERIALS

	Purchase of raw material					Consumption				
	Coir fiber (in Kgs.)			Nylon thread	Rate	Coir fiber (in Kgs.)		Nylon thread		Other expenses (freight, marketing, repair and maintenane, training)
	Dry(KG)	COST OF RAW MATERIAL (INR)	QUOTED RATE PER KG	Nylon bobin (n°)	COST OF NYLON (INR)	Dry (kg)	cost (INR)	No of unit	Rate	
Mar-14	667	4960	7	0	0	665	5323	0	0	2075
Apr-14	740	5920	8	0	0	739	5908	0	0	700
May-14	1240	9920	8	0	0	907	7252	0	0	1650
Jun-14	180	1440	8	0	0	512	4099	0	0	500
Jul-14	1178	9421	8	0	0	945	7560	0	0	1250
Aug-14	1280	10240	8	0	0	1349	10792	0	0	2040
Sep-14	1320	10560	8	33	3700	1113	8900	33	3700	780
Oct-14	1020	8160	8	0	0	667	5332	0	0	1104
Nov-14	1190	9520	8	0	0	923	7384	0	0	5685
Dec-14	1570	12560	8	0	0	861	6888	0	0	1780
Jan-15	0	0		0		266	2128	0	0	400
Feb-15	0	0		0	0	98	784	0	0	0
Mar-15	0	0		0	0	357	2856	0	0	0
Apr-15	1370	10960	8	0	0	1113	8904	0	0	0
May-15	1245	9960	8	29	3200	840	6720	29	3200	970
Jun-15	1375	11000	8	0	0	224	1792	0	0	1000
Jul-15	0	0		0	0	1242	9936	0	0	1330
Aug-15	3735	29880	8	0	0	2940	23520	0	0	8960
Sep-15	1355	10840	8	0	0	2160	17280	0	0	1100
Oct-15	0	0		0	0	1340	10720	0	0	0
Nov-15	0	0		0	0	20	160	0	0	0
Dec-15	0	0		0	0	20	160	0	0	1000
Jan-16	0	0		0	0	20	160	0	0	0
CUMUL	19465	155341		62	6900	19320	154558	62	6900	32324

THE COIR MAKING UNIT - AVERAGE COST OF PRODUCTION (INR PER KILO OF COIR ROPE PRODUCED)

	10,75	19,465 kg of coir fiber @ INR 8,000 per metric ton divided by the production of coir rope (14488 kg), price is stable over the time period; delivered to the unit from Anumandai (transportation is included in the cost of the coir)
Nylon thread	0,48	62 bobbins used @ INR 111 per bobbin or 6900 / 14488
Labour	17,49	INR 253,350 (cumulated wages since 2014) divided by 14488
Utilities	1,19	INR 750/month (1000 for the campus) X 23 months / 14488
Rent	1,59	INR 1000/month ("royalties") X 23 months / 14488
Others	2,24	INR 32,324 / 14448 (freight charges, marketing linkage, repair and maintenance, training)
TOTAL COST INR/KG	33,74	