

The Republic of India

The Republic of India
Preparatory Survey on BOP business
on Promotion of
sanitary products for women in
rural area
Final Report (Summary)

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Abbreviation

AEP	Adolescent Education Programme
ASHA	Accredited Social Health Activist
FMCG	Fast Moving Consumer Goods
HSC	Higher Secondary School
ICDS	Integrated Child Development Service
MRP	Max Rural Price
NGO	Non-Governmental Organization
NRHM	National Rural Health Mission
NSS	National Sample Survey
PG	Post Graduate
SEC	Social Economic Class
SHG	Self Help Group
SSC	Secondary School
TV	Television
TVCM	Television Commercial
UP	Uttar Pradesh

1. Research Summary

1.1 Background and purpose of the research

It is estimated that the number of women having menstruation is about 224.66 billion¹ in the farming areas of India, and it is also said that more than 80 percent of them are not using the disposable sanitary napkins. (This will be referred to as the sanitary napkins in order to segregate from the cloth napkins.) Women not using the Sanitary Napkins are using pieces of clothes or sheets, but there are problems in using such old clothes, and during the period they are sometimes forced to be unable to go to school, to do the regular works, or to do the usual activities due to the anxiety of leakage or uncomfortable usage. Also, since the clothes are repeatedly used and cleaning and drying are not properly done, there is a possibility of having hygienic troubles such as infectious diseases.

Purpose of the research is that Unicharm (referred as UC) has made the qualitative research before conducting this research in the rural areas near Lucknow, Uttar Pradesh State and in Pune, Maharashtra, interviewing women of 15 - 29 years old. As a result we could find below stated hindrance for penetration, but the results are just based on limited number of interviewees and areas. ① They do not know the mechanism of menstruation and the existence of sanitary napkins. ② They do not understand the benefit of using the sanitary napkins. ③ Economically they are not afford to buy. ④ No place to buy ⑤ No place to dispose sanitary napkin after use

If we could eliminate the factors of hindrance surrounding the women in rural areas as above described, and could offer the business model by which they can buy and use the sanitary napkins, it would be possible for them to get away from the worries of leakage and discomfort and live a normal life. If this was possible, the women could reduce the limitation of activities during menstruation and their school attendance rate or social activities will be better. Eventually, the interest in their own health will be created and improved before developing their total hygienic knowledge. Finally we can expect their hygiene level as a mother of the next generation toward the babies will be improved. There is also the possibility of creating jobs for women in the rural areas because we need the womanpower in those areas for delivering such products for women.

¹ Women population of 13~49 years old from 2011CENSUS

1.2 Content of research

This research are done in 28 months from August, 2012 to November, 2014, and it was planned and executed by dividing it into the main two phases. In the first phase we made the research trying to cover the reality of consumers and governmental measures of the total India as much as possible, and tried to find the direction of the business model through the analysis of the results. In the next phase we were making a business plan in order to verify the direction and execute the pilot through the result of analysis, but actually we needed to make modification by the result of pilot, and we conducted research after the pilot, too.

This research is the promotion of BOP business collaboration and it is the business model research targeting the women living in the rural areas.

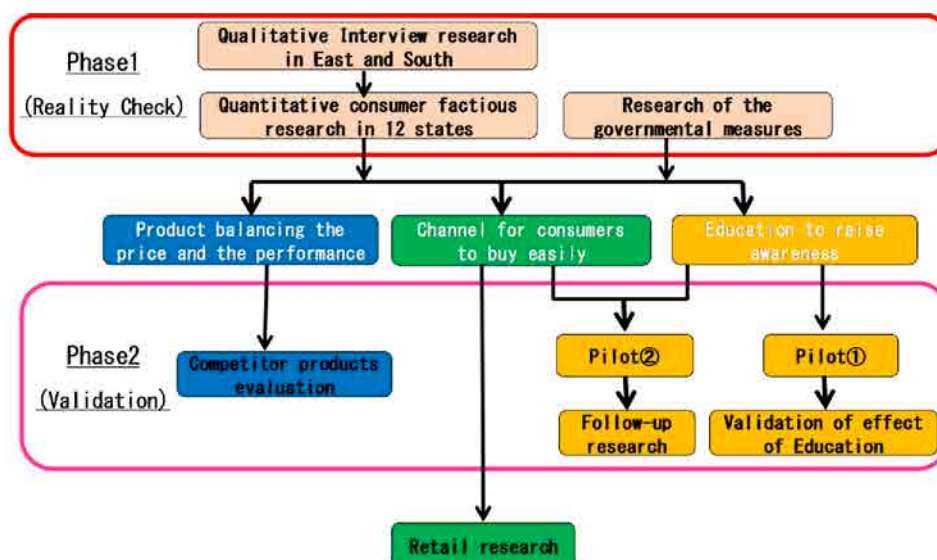


Fig.1-1 Conceptual diagram of the research (Made by the research group)

1.3 General condition of India

India is composed of 28 states² and seven union territories, and there are administrative districts under the state. The segments and the Unit numbers are as below described

² When report writing, Telangana state is devided from Andhra Pradesh state and became total 29 states

	Unit number
State/UTs	35
Districts	640
Towns	11,825
Villages	640,930

Fig.1-2 Number of unit in each section
(Made by the research group from 2011CENSUS)

Since there are six hundred and forty thousand farming villages in India, we considered the representation and the reproducibility to divide the villages into seven segments by the size of population. The division was made by each relative incidence so there should be no deviation among villages at the research.

	Population Scale	Total Population	Number of village
P1	Over 10,000	72,366,805	4,682
P2	5,000–9,999	123,808,537	18,641
P3	2,000–4,999	288,637,987	96,388
P4	1,000–1,999	197,496,806	139,136
P5	500–999	103,291,220	141,761
P6	200–499	39,683,027	114,726
P7	Below 200	8,179,066	82,149

Fig.1-3 Segmentation of village³

(Made by the research group with the information from the research company)

Also, we applied the classification by age and the Social Economic Class (referred as SEC) for consumers so there should be no deviation to make segments. Social Economic Class could be different by country, city and rural area, so we made the classification in this research by the educational background and the type of residence of the head of the household.

³ When holding research, 2011CENSUS has not established, so used 2001Census data

Education	House Type		
	Pucca (Wall material is Bunt bricks, stones etc. Roof material is Tiles, Iron sheets, etc.)	Semi Pucca (A house that has fixed walls made up of pucca material)	Kuccha (Wall and roof is made up of mud, dry stones, Bamboo grass, thatch, etc.)
Illiterate	R4	R4	R4
Below SSC	R3	R3	R4
SSC/ HSC	R2	R3	R3
Some Collage not Graduate	R1	R2	R3
Grad / PG (General)	R1	R2	R3
Grad / PG (Professional)	R1	R2	R3

Fig.1-4 Definition of SEC

(Made by the research group with the information from the research company)

2. Consumer research

2.1 Research method

The figures being analyzed here are mainly from the two consumer researches. One is the quantitative consumer factious research in 12 states done by our group, and the other is National Sample Survey (to be referred to as NSS) done by the Indian Ministry of Statistics and Programme Implementation.

The 12 states are Bihar / Orissa / West Bengal / Gujarat / Madhya Pradesh / Maharashtra / Karnataka / Andhra Pradesh / Tamil Nadu / Rajasthan / Utter Pradesh / Punjab.

2.2 Result of research

The result by quantitative consumer factious research in 12 states showed that the average number of users who used the sanitary napkins during the last period was 19%. For breaking this average of 19% further down, we analyzed it by state, age, SEC and the size of village. This analysis makes it possible to find the obstacle factors of penetration and to plan how to execute the Pilot and to sett up the target people and place. We found large and small differences among each analysis like by SEC > by state > by age > by size of village. Here we explain the data by SEC, where we found the largest difference.

The highest usage rate was 43% in R1 and the lowest was 11% in R4 which has the largest component ratio. There are land owners and village headmen in R1 so the group is rich. The household income was also high by the same research. By this result we guess the usage rate of sanitary napkins is highly influenced by economy.

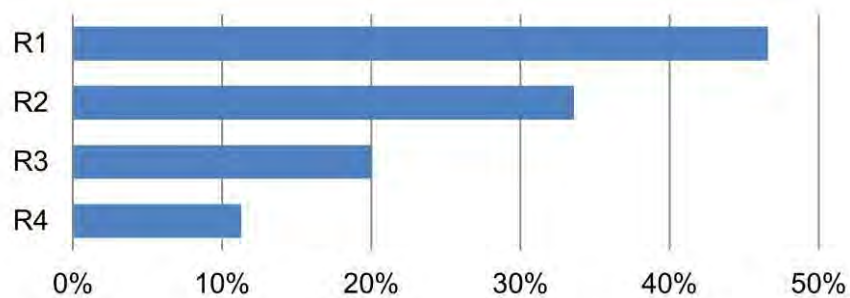


Fig.2-1 Sanitary napkin usage rate by SEC
(Quantitative consumer factious research in 12 states)

2.3 Summary

For the factors which will promote the usage of sanitary napkins we created the

hypothesis that we would need such three approaches as “education to raise the awareness,” “channels for consumers to buy easily,” and “products balancing the price and the performance.” We will carry out the verification of promoting the penetration by these approaches through this research.

No-Awareness		26.6			⇒Education
Awareness	Non-User	42.9	Reason	① Expensive	⇒Product
				② Satisfaction	⇒Education
				③ Family member use cloth	⇒Education
				④ Shame to buy	⇒Channel
				⑤ Not available easily	⇒Channel
	Stopped	10.6	Reason	① Satisfaction	⇒Education
				② Expensive	⇒Product
				③ Use cloth around them	⇒Education
				④ Can' t buy near	⇒Channel
				⑤ Shops are far	⇒Channel
	User	19.9	Trouble	① No reason	
				② Expensive	⇒Product
				③ Can' t buy near	⇒Channel
				④ Difficult to dispose	
				⑤ Not Fit	⇒Product

Fig.2-2 Points for penetration
(Quantitative consumer factious research in 12 states)

3. Research of the governmental measures

3.1 Research method

The main data reported and analyzed here are the results of hearing research which the research group did for the central government and the state government. The group occasionally did the internet researches and interviews in order to check the data more deeply.

3.2 Results

There are three measures related to the menstruation and hygiene issues which are collaborated with the central government and the state government. The basic role of the central government is to show the direction to the goal and to give the financial support, while the state government is responsible to create plans and operate them. Those three measures are controlled by different ministries, and through the interview some opinion in the state government mentioned an issue that the co-work was not good. The measures are greatly rely on the central government and only few state governments are independently acting on such issues. But gradually state governments or local governments are starting to sell inexpensive sanitary napkins or to deliver them. The people in the state government notice the issues that the women in rural areas do not talk about the menstruation because of shyness or do not openly exchange information about it, and they keep doing unhygienic treatment without knowing about the changes of body in adolescence and how to treat them. But the government people are putting more attention to taking care of new-born babies and pregnant women. Since the central government also noticed that the penetration of sanitary napkins would contribute to the prevention of the reproductive tract infection and drop-outs in schools, they are starting to promote the usage of sanitary napkins. The activity of such penetration in rural areas has started in 2010 by the measures of NRHM. In order to eliminate the largest obstacles for the penetration of sanitary napkins, which are lack of knowledge, pricing and the supply system, they started to sell inexpensive napkins, as well as giving education, utilizing ASHA and SHG. In some areas the village women are even working to manufacture sanitary napkins. However, the activities by the central government is only for the limited areas and terms, so, it will take very long time until they cover all the areas of India.

The main three measures done by the central and state governments and the ministries

in charge are as following:

- National Rural Health Mission (NRHM)
Health & Family Welfare
- Integrated Child Development Service (ICDS)
Women & Child Development Service
- Adolescent Education Programme (AEP)
Human Resource Development

4. Research of competition

4.1 Research items and method

In many cases the competitive products are the sanitary napkins made and sold by the competing company, however, the main strategy this time is to change from cloth napkins, so the competition is cloth this time. We did the survey through the usage test and interview with the main questions for how to use the cloth and what the troubles were. (The village women actually used the samples and they answered the questions and wrote the diary.) This test was done in a part of country, so we used the research results of the quantitative research of 12 states in order to adjust the consistency of the total India.

Although we set up the cloth napkin as the competition, some sanitary napkins of the competitive manufacturers were also used in villages.

4.2 Research results

4.2.1 Cloth

Women do not buy the cloth for treating menstruation but they use old cloth of wears or bedding in house. Everyone answered they would use cotton cloth because it is good for absorption and soft to skin. However, when we directly saw the material, the old bedding cloth was thin and hard, so we thought it was not appropriate for treating menstruation in views of absorption and influence on skin. Actually, when we measured the absorption speed, the worst cloth was seven times slower at the speed compared with the sanitary napkin.

Probably because they understand the bad absorption, the weight of one cloth napkin to be used one time was as heavy as 25gs, and some were even heavier than 60gs. For reference the regular 230mm wing type sanitary napkin weighs about 8gs, so the average weight of cloth napkins is nearly four times heavier. They even fold such a thick napkin a few times to use, so, it can never be comfortable and we are afraid that it may cause a graze on skin. Moreover, if the graze was exposed to unhygienic condition, the risk of rash can be considered, too.

4.2.2 Sanitary Napkin

As for the brands of sanitary napkins which are often used in rural areas, Stayfree by J&J is used by 50% and Whisper by P&G is 43%. These two brands are occupying

almost all the market. Further breakdown shows that Stayfree Secure has 36% and Whisper Choice has 34% shares.

	Whisper Choice		Stayfree Secure	
Type	With Wing	Straight Type	With Wing	Straight Type
Length	230mm	230mm	230mm	230mm
Market Share	18%	11%	8%	16%
MRP	29Rs	22Rs	25Rs	20Rs
Package photo				
Material photo				

Fig. 4-1 Main Product⁴ (Made by the research group)

⁴ Research timing of MRP is September 2013

5 Pilot

5.1 Outline of research

Since we conducted Pilot two times, here we show Pilot ① and Pilot ②, which were different in size. Figure 5-1 is the overview. We recognized that the knowledge of menstruation and understanding of the benefit of using sanitary napkins are needed for the young people through the consumer survey and the research of the governmental measures. In Japan the education of menstruation and health is given at school, and TVCM of napkins are often aired. The products are available in stores and the girls can directly touch it and reach the information, so all the women having menstruation have the knowledge and experience of use as a result. However, in villages of India, many girls do not know it until the first menstruation comes, and even after that they do not know the correct information of menstruation, the changes of body and the benefit of using sanitary napkins. Each Pilot has a different purpose, but they are all composed with the education of menstruation situated in the center. The purpose of Pilot ① is to see how the target people's knowledge about sanitary napkin is improved by conducting the menstrual education and to see whether the usage rate would increase as a result. Pilot ② is smaller in size, but we sold the actual products in combination with the education and confirmed the influence in sales.

	Pilot①	Pilot②
Term	Jan. ~Jun. 2013	Feb. 2014
Place	Haryana 州	Uttar Pradesh
Target	Girls age of 11~13	Women's Shop customer
Trainer	SHG100 person in the village	Trainer who trained by NGO
Time of Education	70min	15min
Target Number	10,000	Around50×2Shops

Fig. 5-1 Contents of Pilot①② (Made by the research group)

5.2 Pilot①

In Pilot ① we conducted the follow-up survey ten months after giving the education to the girls who had not had the first menstruation at the time of education. The values to compare are the figures in the baseline survey of Pilot ①. The number

of samples in the follow-up survey was 214, but the ratios of religions and SEC were the same so the direct comparison was feasible.

The usage rate of sanitary napkins by the girls with menstruation in the baseline was 45.8% and the usage rate in the follow-up survey was 65.4%. It increased by 20% approximately. Especially it has increased a lot in R4 which is poorer than others. There was almost no change in R1 because the usage rate has been already over 90%. The survey of the baseline was in 2013 and the follow-up survey was done in 2014, which means the time lag is about a year. So, it is possible to consider that the usage rate at the baseline in 2014 (no education) is slightly over the baseline in 2013.

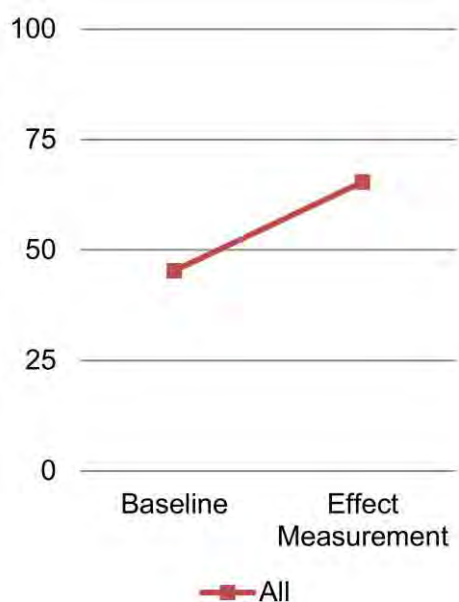


Fig.5-2 Trend of usage rate of sanitary napkin in total (Follow-up research)

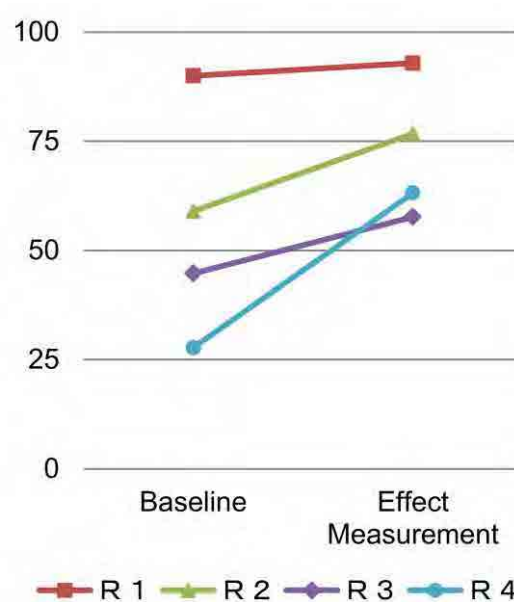


Fig.5-3 Trend of usage rate of sanitary napkins by SEC (Follow-up research)

In the summary 2.3 we described that in order to make sanitary napkins penetrate in the rural areas we would need “education to raise the awareness,” “channels for consumers to buy easily,” and “product balancing the price and performance.” Though we only did “education to raise the awareness” in this Pilot, we could see 20% increase of usage rate. Due to the fact that the sanitary napkin brands which girls were buying were Stayfree Secure by 50% and Whisper Choice by 44%, we can see the girls belonging to R3 or R4 are able to buy the sanitary napkins made by the global companies on market. It can be expected that the usage rate would go up if we had more inexpensive products, which was proved by the reason not to use, but we would need extra cost for giving the menstrual education, which is not in Japan, and the

target for this is nearly two hundred million. Moreover, it should be executed in short term, which is not possible, so, it is more desirable that we should target the people with purchasing ability.

Among the three measures we should take, we think “education to raise the awareness” is necessary anyhow and “product balancing the price and the performance” is something we can make penetrate into consumers with the same price being sold in villages now. Then, what should we do with “channel for consumers to buy easily” ? So, in Pilot ② we will carry out these two, “education to raise the awareness” and “channel for consumers to buy easily” among the three at the same time.

5.3 Pilot②

5.3.1 Survey for the partner

Women’s Shop is a retail shop which is run by a woman entrepreneur in village selling goods for women. Richo and Drishtee started the system from finding the entrepreneur to opening the shop, and they even support the sales after opening the shop. Such a shop is quite suitable for sanitary napkins which women hesitate to buy from the male shopkeeper. Actually the current these shops are selling the sanitary napkins of J&J and P&G. So, we have made the Women’s shop the base of menstrual education and the sales.

5.3.2 Effect of menstrual education (by sales)

The sales result was much worse than we expected. After giving the education, the intention to use sanitary napkins was high. There were many young people attending it, so we were expecting the changes from cloth to sanitary napkin and the current users changing the shops. We also expected more than half of the attendants would buy at the women’s shop. However, there was no difference between the shops where the education was done and the shops without it. Among the current stores the sales of shops without education have even increased the sales of our products.

	Edducation	1st month (Package)	2nd month (Package)	3rd month (Package)
New Shop	Yes	0	3	1
	No	1	2	0
Current Shop	Yes	Sofy:3 Competitor:5	Sofy:4 Competitor:6	Sofy:4 Competitor:2
	No	Sofy:4 Competitor:2	Sofy:8 Competitor:0	Sofy:12 Competitor:0

Fig.5-4 Data of Sales (Pilot②)

5.3.3 Summary

By the follow-up survey we interviewed 38 people to see when they started to use sanitary napkins. 12 of them answered that they started after the menstrual education, and 7 of them said the education was the chance to start. Though it is the qualitative information, you can say by this Pilot② the education has a great impact on changing to the usage of sanitary napkins. We also found that only 30% of the education attendants at both new and current shops visited again the women's shop. The top three reasons that they do not come again are 1) products at Women's shop are expensive, 2) it is far away, and 3) they buy at other stores. So, we made a hypothesis that they do usual shopping at the limited stores. The effect of the menstrual education was confirmed but it did not lead the sales increase at the Women's shop. In order to find the reasons and solutions we amended the proposal plan and decided to conduct the research of retail stores.

6. Retailers research in 12 States

6.1 Method

We conducted the survey, the quantitative factual consumer research in 12 states, in 2012 in 240 villages of the 12 states. For the retailers research in 12 states we picked up 48 villages from the 240 and surveyed. The purpose was to analyze the reality of the consumers and the retailers together as needed.

6.2 Research items

In 48 villages we researched all of the three types of retailers, Grocery, General Store and Chemist, which, we guess, are handling the sanitary napkins in villages and interviewed the owners. The most popular style in the three is the Grocery and it occupies more than half.

Type of retailer	
Grocers	An outlet dealing mainly in grains, provisions, spices, edible oil, vanaspati etc.
General Store	An outlet dealing in items of day-to-day requirements.
Chemist	An outlet dealing mainly in drugs. And dealing in part of items of day-to-day requirements.

Fig. 6-1 About the sales type (Made by the research group)

6.3 Number of retailers in the three sales styles

Total of 962 retail stores of the three sales styles in 48 villages were picked up. In the following parts of this report “the retailers” .

There are many retailers in a village, mathematically one for 200 people or one for 40 households.

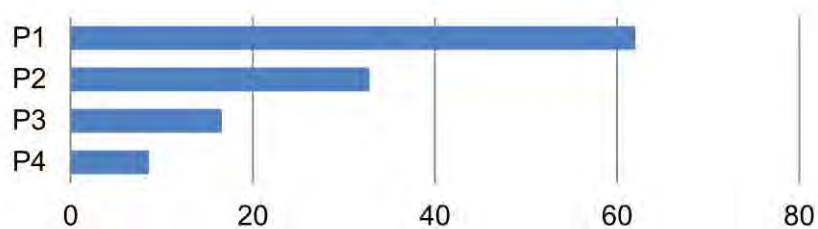


Fig. 6-2 Number of retail shops in a village by village population

6.4 Stores selling napkins

Among 48 villages, 16 villages had no stores selling sanitary napkins. In P1 and P2 villages, where the population was more than 5,000, all the stores were carrying sanitary napkins, so, it can be said that the higher population of village the higher possibility of selling sanitary napkins.

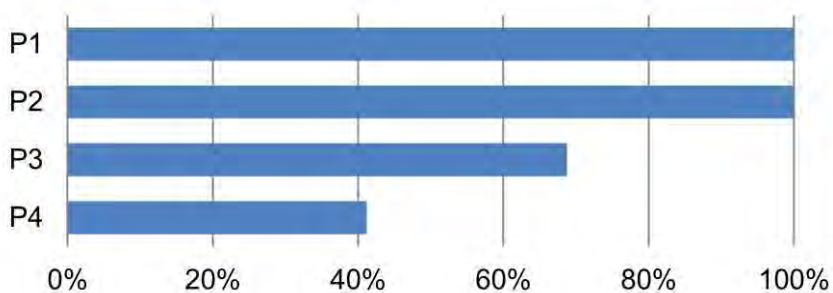


Fig. 6-3 Ratio of villages selling Sanitary Napkins

6.5 Credit sale

Nearly 70% of stores accept the credit sale and more than 30% customers are buying on credit in average in those stores. The percentage of credit sale is different in each store, and in 20% stores, more than 60% customers buy on credit. This shows that the stores have lots of regular customers. So, it is suspected that even if a new store selling sanitary napkins opens in a village, they do not go to the store easily.

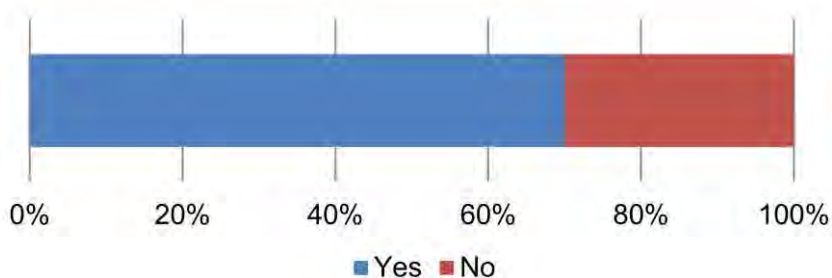


Fig. 6-4 Ratio of stores selling on credit

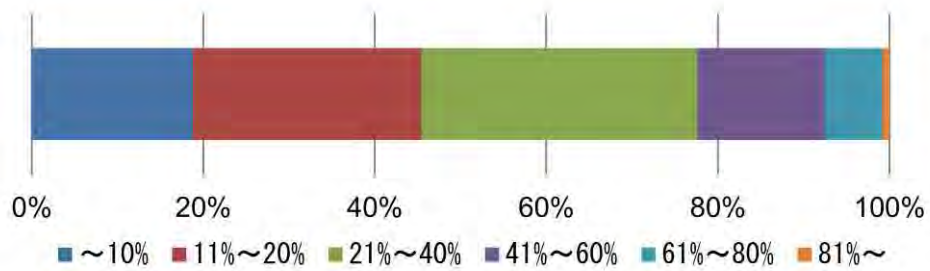


Fig. 6-5 Customers buying on credit in store

6.6 Summary

We understood that there were plenty of stores of three sales styles as Chemist, Grocery, and General Store in village, and many of their customers are regular customers. So, we also understood the reason why they would not start buying the products in remote stores or unfamiliar stores even though they had attended in the event of education by Pilot ②. When we establish the business in village, it is not enough to cover one store with napkins but we need to cover stores more widely.

7. Business Plan

7.1 Conditions

Before creating the business plan, we reestablish the target based on the research result. The reason for it is that if the target was all the women in the rural area, the reality varies too widely and its volume may be too large. So, making the countermeasures for penetration may be diffused. We suspected this can possibly cause slowing down of speed. We mentioned at the beginning that the number of women in villages is 224.66 million, and if all of them use 6.1 sanitary napkins⁵ for one menstruation period in average, the total consumption of a year will be as large as 16.4 billion napkins. This is not realistic from the view point of production capacity. And if you consider the points, “Women’s social activities will expand by improving the limitation during the period” and “Hygienic concept of the mothers will be improved in next generation through understanding the physical system like the menstruation,” it should be appropriate to put priorities on the target people.

7.1.1 Target

We put priorities on the target based on 1) age, 2) size of village and 3) income.

7.1.1.1 Age

The number of village women is 224.66 billion but we will limit the target to the unmarried women only. In this case the number of target is 84 million. The average of the age of marriage is about twenty years old, so the target in the rural area is of the population between 12 and 20 years old. These are the major target but you can expect that they can influence on their mothers, sisters or the families after marriage for using the sanitary napkins.

⁵ From Quantitative consumer factious research in 12 states

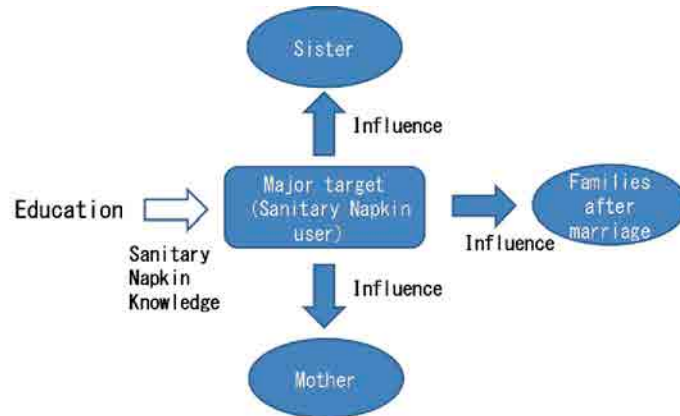


Fig.7-1 Figures of ripple effect

7.1.1.2 Village size

Another major target is the village where sanitary napkins are not sold. By this research we could reconfirm that the changes from the menstrual education to the awareness and purchase intention are important, but it is also needed, after collecting the investment for the menstrual education, to take the responsibility of continuously supplying the sanitary napkins and continuously improving and expanding the awareness by education. It is necessary to pursue the effectiveness (return on investment) by which you can get profit in order to collect the investment for the menstrual education, and we believe that we should capture the villages where no sanitary napkins are sold and build the barriers to enter there. In most of the villages with 5,000 people or more there are stores selling sanitary napkins. So we think the target should be the villages with the population between 1,000 and 5,000 on page 3 and 4. Though we have no research data of villages with less than 1,000 population, we suppose there are few villages with stores selling sanitary napkins by the data on P1 - P4. We do not make them the target because the size of target will be too small if the target was set village by village.

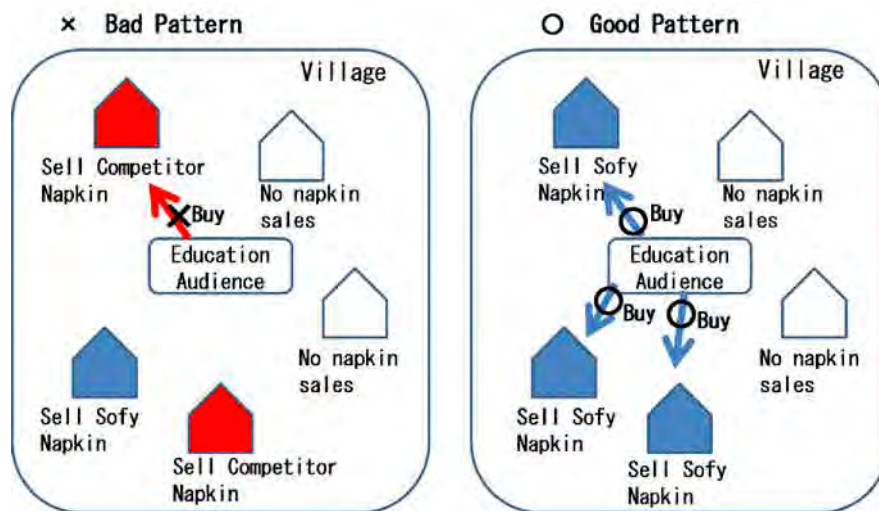


Fig.7-2 Figures of purchasing

7.1.1.3 Income

The first reason not to buy the sanitary napkins we found by the follow-up survey of Pilot① was the high price. Also, in the quantitative factual survey of consumers in 12 states, we saw the correlation between the household income and the usage of sanitary napkins. Sanitary napkin is not yet the daily necessities in the rural villages in India. We suspect that they buy the napkins after buying the foods and other hygienic items (tooth paste or soap, etc.) with the remaining money. So, referring to the usage rate of Pilot ①, we set up such target as 95% in R1, 75% in R2, 65% in R3 and 60% in R4.

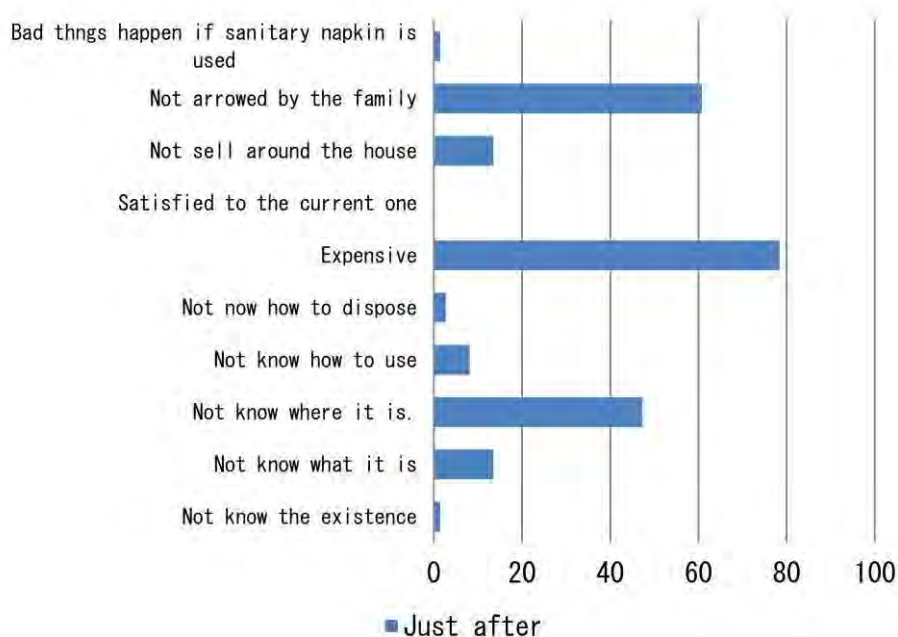


Fig.7-3 Reasons not to use after education (Follu-up research)

7.1.2 Potential market (Estimate)

While the potential market size could be 16.4 billion napkins if you calculate with the total number of women in the rural villages, the estimate of the market calculated by the major target set in 7.1 would be 2.2 billion napkins. If you would expect the ripple effect mentioned in 7.1.1, it could be nearly 2.5 billion napkins. However, these figures show the estimate of the potential market only. If you consider the actual market (using napkins) would be 20% of it, the market size with the major target would be 1.75 billion napkins.

This is for the target set in 7.1.1, and if the penetration stopped with this target, we should improve the penetration plan with the other target (village of population less than 1,000) based on the actual results, and operate.

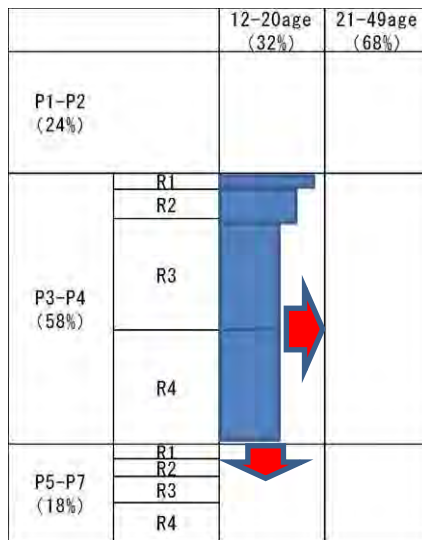


Fig.7-4 Conceptual diagram of calculation and figures of development

7.2 Factors for penetration

Through the factual surveys and Pilot, we found no changes with “education to raise the awareness,” “channels for consumers to buy easily” and “products balancing price and performance,” described in the summary in Chapter 2 as the factors to promote penetration in the rural villages. We believe this hypothesis has been made clear. However, if you consider the continuation of activities for better penetration and expansion, the important thing would be how to effectively collect (by selling) the prior investment (menstrual education).

7.2.1 Product balancing price and performance

If the major target set in Chapter 7 were able to purchase, then in order to continue and expand the penetration plan, investing on the menstrual education, and to avoid the risk of investment, it would be more desirable to utilize Sofy Bodyfit REGULAR which is sold in the urban areas than to spend time and money for developing more economical product.

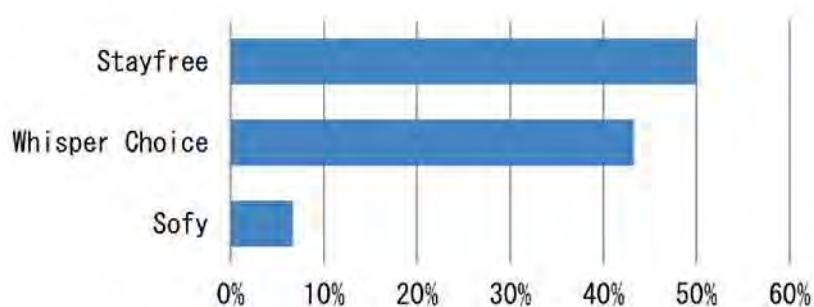


图 7-5 Using brand of napkins at Pilot① (Follow-up research)

7.2.2 Education to raise the awareness

During Pilot ① the cost of the menstrual education for 10,000 girls was 1,15 million Rs (The initial planning cost and research for the education were not included. The cost for the samples and booklets was included on condition to continue.) So, the cost for one person was 115 Rs, equivalent to 200 Japanese Yen. 115 Rs looks expensive in India but this cost was based on the long term basis, so, if you work with a new NGO or educate new SHG, the cost will be even higher. If you sell an 8 pack count sanitary napkin at 29 Rs and 10% of the price (2.9 Rs) was paid for collecting the cost of education, you would need to sell 40 packages to pay back. If one package was bought a month, the pay-back term would be three years roughly.

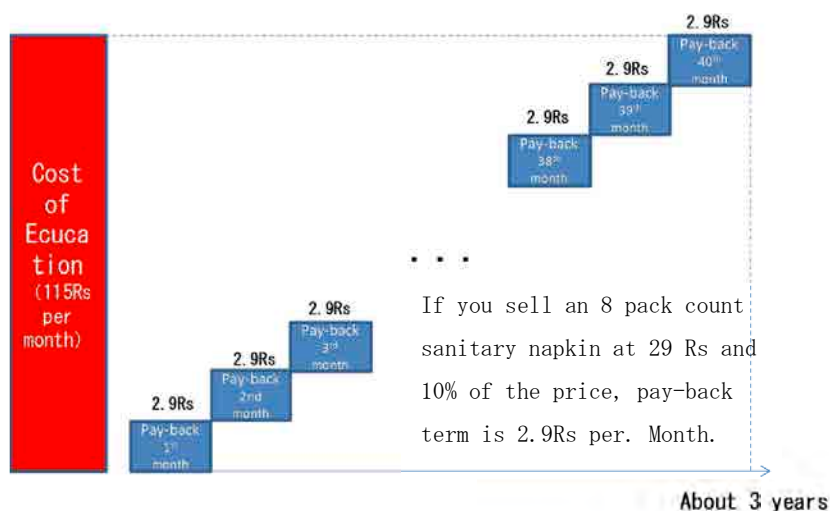


Fig.7-6 Figures of collecting costs for education

7.2.3 The Channel where consumers can easily buy

In order to collect back the investment on the menstrual education from the customers who changed to the sanitary napkin, we want them to use our napkins continuously. When we sell products at Chemist, Grocer and General Stores, we need to sell at as many stores as possible in the village in order to keep the educated people and defend competitors from coming in. But we must consider that the competitors have experience of selling in many stores in villages and they may expand their network in the urban areas to come out into the rural areas. So, we should avoid the direct conflict in stores selling FMCG, and create the business plan which combines the menstrual education and the channel. The combination of the education and the channel has also a benefit that the village has a woman who has the knowledge and can give consultation,

and it is easy to understand who they can the product buy from.

7.2.3.1 Investigating the Channel

When the consumer obtains a product, there are two ways such as the consumer goes to the product or the product goes close to the consumer. The representing example of the former case is the places like FMCG retailers, beauty salons or nail salon where many women gather. The examples of latter are cooperatives, chapmen, door-to-door sales or the sales in schools. Thus there are many candidates for the channel but it is still a question whether any group is controlling such candidates of channels. Since it is impossible for us to control the channel candidates in each village, it is desirable to work with a group who can control the channels on the state basis, or hopefully work with a group who have already established such network.

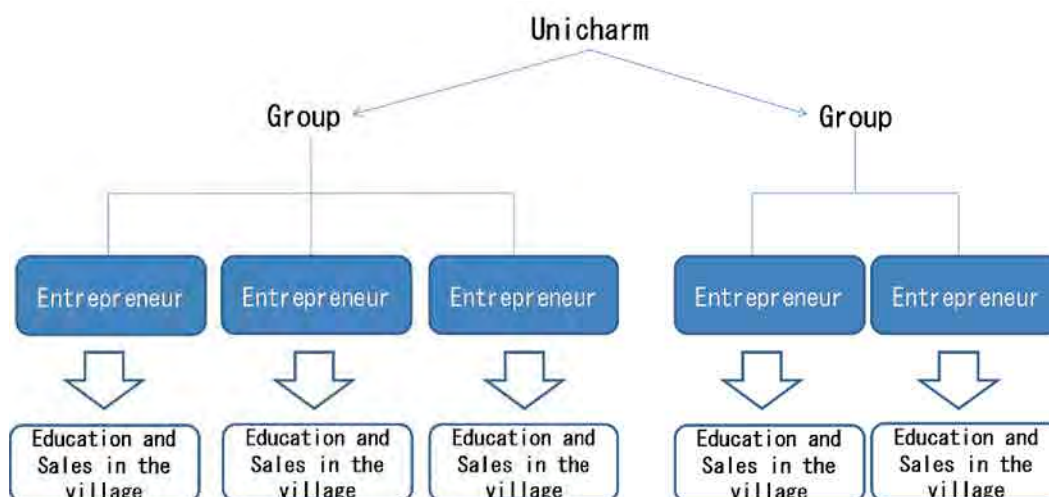


Fig.7-7 Figures of network

7.4 Pilot③ Plan

The purpose of Pilot③ is to verify whether the plan could be the sustainable penetration plan and whether the investment could be paid back if we spent for educating female entrepreneurs in village and introduce such sales system and if we spent for the menstrual education. The method is to pick up a village where sanitary napkins are not sold, and let the village entrepreneurs selling other products than sanitary napkins give the menstrual education to the target people. And let them sell the sanitary napkins, too. It is necessary to give training for the menstrual education and its knowledge to them, but we can save cost for sales training by utilizing such female entrepreneurs. We can also expect the ripple effect of using sanitary napkins

reaches not only to the major target but to the surrounding people because the woman in the village sells the products where no education was done and no sanitary napkins were sold.

7.5 Conclusion

The purpose of this research is to create the business plan by which we want the women living in villages to start using sanitary napkins to treat the menstruation.

For increasing the usage rate of sanitary napkins the most important thing is that the women have correct information about menstruation and understand the benefit of using sanitary napkins. However, there is no system for the menstrual education by the Indian government to be conducted nationally, so the only way to get such information must come through TVCM, in stores or mouth-to-mouth communication. The penetration of TV in village has been developed but the women or students cannot enjoy it for a long time due to unstable electric supply or domestic works. Even if they see the TVCM of sanitary napkins, they do not think it is the product for them due to lack of recognition, so it does not evoke their awareness or interest. Available information is also limited in stores or through mouth-to-mouth communication.

Through this research we could promote trial usage keeping direct communication with the users by the menstrual education and sample deliveries and could verify the result of increasing the usage so that they can collect not only the knowledge about sanitary napkins but also the changes of body in adolescence and menstruation. We made “education to raise awareness” through the direct communication with users the first factor of penetration.

We set up “channel for consumers to buy easily” for the second factor of penetration. The consumer here means of course the women in village. But, even if the women in village had intention to use through the information of sanitary napkins, their activity area is normally very limited and they cannot buy sanitary napkins because the nearby stores do not carry them. Moreover, even if the stores had them, the available kinds are limited and it is difficult to buy the brand they want. In case the store is kept by a male, they hesitate buying the napkins. So, for these reasons the importance of “channel for consumers to buy easily” is very high.

We set up the third factor for penetration which is “superior product balancing the price and performance” so consumers can afford to purchase. Not only in rural areas but also in urban areas the condition for changing napkins is not well prepared - toilets are not available or toilets are dirty. There is no place to dispose the used napkins or cloths. So, the changing pattern is only two times a day, once in the morning and once in the evening. They are forced to wear one napkin for a longer

time compared with other countries. Besides the retail prices are set at lower level compared with other countries so the sanitary napkins currently sold are good for their prices. One thing we are concerned about is whether the consumers in rural areas can accept those prices, but, judging from the Pilot ① result, we could confirm that 60% of consumers in SEC R4 could buy the sanitary napkins of global companies at the current prices. Taking these conditions into consideration, we will consider the product line-up based on the products currently sold in urban areas because they were already on the market for a long time, we see many consumers able to buy, and quick introduction can be expected. However, although we will set the target people who are able to buy 8 pack count at 29Rs on the first stage of the business plan, we may start product development if we judged lower priced products would be needed on the first stage. But if we consider the first stage would be five years, it might be possible that the current consumers who are not able to buy at 29Rs would be changed to the feasible users due to increase of their income.

Through this research we made the target stage by stage, and we put the target on the purchasable group on the first stage, so we could solve the issue of “product balancing the price and the performance” which is the third factor of penetration. For realizing the business plan we need to solve the issues such as “education to raise the awareness” and “channel for consumers to buy easily,” which will be the key. Regarding “education to raise the awareness” issues are how to determine the ages for attendants and adjustment of the program, but more important side is how to collect the investment for the education program. There are costs for the menstrual education such as the labor cost for the teachers, printing booklets, rental fee, samples and labor cost for workers of preparation, and such costs should be collected by selling the sanitary napkins to the attendants of the education and other people around them. In other words we should consider whether they should be covered by the profit of the manufacturer or the profit of the retailers. Of course collection of the investment is not the short-term solution such as selling one pack of sanitary napkins, but what we calculated was that it would take about three years even if we could sell one package to one person every month with 10% profit for collection selling at 29Rs, because we spent 115Rs per person for education at Pilot ①. Therefore, what we need to do will be decreasing the cost for education and enhancing the ripple effect of the education so we can solve the issues of investment collection. We are thinking to pay only daily allowance during the first training period to the teachers, meaning we do not pay for their teaching at the education period. We want the teachers to benefit from the incremental sales of napkins through the education arranged by their own will and ideas. We also consider creating the system with incentives for the teachers with good sales and sharing and praising the experience of success so their motivation goes up. We think the issues in “channel for consumers

to buy easily” are how to adjust our style to the real behavior of village women and how to enclose the target by the combination with the menstrual education. If we consider enclosing the target, the sales at FMCG, which we often see in the village, would not be effective, so, we are considering to deliver the products by women to where the consumers are, being opposite to the regular model by which consumers should go to retailers.

In villages in India there are many women entrepreneurs or SHGs selling grain or daily necessities at home or by visits where they live. We could confirm by internet that there are NGO, NPO or SE who are supporting and organizing those women entrepreneurs or SHGs in whole India. We will pick up such a group as a partner this time.

Through Pilot③ in future we will verify the measures to solve issues in “education to raise awareness” and “channel for consumers to buy easily,” then we will be able to bring up the accuracy of our business plan of sustainable penetration of sanitary napkins.

Factor	Issue	Measure
Education to raise aware-ness	Collection of cost for education	Cutting cost for education, enhancing ripple effect
Channel for consumers to buy easily	Limited activity area of village women Quite many retail shops	Model female seller delivers products to consumers
Product balancing the price and the performance	Some in R3/R4 cannot buy sanitary napkins for pricing	Set the target at financially purchasable group

Fig. 7-8 Issues and measures for the business plan on 1st stage

8. Effect by development

The themes of development which this project is going to cover are “development of hygienic sense” and “progress of women at their social activity.”

8.1 Development of hygienic sense

There are two major routes where this project contributes to develop the hygienic sense. The first is not only to sell the sanitary napkins but also to have the target people study the changes of body during adolescence, mechanism of menstruation and how to control the menstruation itself. We want them to have interest in own body at the beginning, and we want them to utilize what they learn for the development and improvement of hygienic sense of the partner, children and surrounding family members. The second is to have them treat the menstruation hygienically using the disposable sanitary napkins made in the hygienic factory. They are superior at absorption and not sticky during use, and they are made of soft materials by which you can expect much less skin troubles.

8.2 Progress of women at their social activities

There are two major areas for the progress of women’s social activities by this project. The first is to support the women who use sanitary napkins so they can better go into the social activities and the school attendance rate is improved. The second is to supply working chances to women who deliver the sanitary napkins to customers.

8.3 Conclusion

By the penetration of sanitary napkins and the menstrual education, the women in villages can improve their knowledge of body, sex and reproduction, and we can expect their “development of hygienic sense” after they are able to treat the menstruation hygienically. Also, by the penetration of sanitary napkins, the physical and mental restriction of activities during the period can be reduced, and “progress of women at social activities” can be expected because women are expected to play the roles of production, transportation and sales of sanitary napkins.

We think that both the sale of 1 Rs napkin by NRHM of the central government or state government and the delivery of free napkins by the state government are done because they thought sanitary napkins are necessary. Solving issues by R&D does not influence on the usage of sanitary napkins strongly but it is quite necessary to fix the

circumstances where women can use them. Using sanitary napkins is the right of women.

State	Reasons
UP state	Works for better dropout rate and improvement of girl's confidence
Bihar state	Girl goes to school, learn about hygiene, and spread knowledge about health.
Mumbai	<ul style="list-style-type: none">• Girls are currently using old cloth or paper which are prohibited by health specialists.• It is known that girls like to stay at home better than going to school during the period. This will badly influence on study in long term.

Fig. 8-1 Reasons that state government delivers sanitary napkins

9. Collaboration with JICA's project

Promoting the penetration of sanitary napkins is matching the Policy "Support to the women's empowerment and promoting the gender to main stream" made by the International Cooperation Bureau in the Ministry of Foreign Affairs of Japan for 2014 (third of important items.) After completing the cooperative preparation research, we will make efforts to fix the circumstances where village women of India can use the sanitary napkins.

9.1 Collaboration with JICA projects in India

In India the low accessibility to toilet and habit of toileting outside are connected to the spread of diarrhea and infectious diseases, and the council of ministers of Modi, which started in May, 2014, made the target to eliminate outside toileting by 2019. Relating to this plan JICA is collecting information and doing researches in order to plan the supporting system for providing toilets in India. With building lavatories it is indispensable to innovate the people's mind through activities of education for hygiene.

We believe our project is also closely related to the environment of toilets in India. After the penetration of sanitary napkins has developed to a certain level, the next issue will be the small usage numbers. The average of napkins to be used per month is 8 in urban areas and 6 in rural areas. Approximately two napkins a day. There may be no leakage problems but it is very few in view of hygiene. The changing pattern is one time in the morning after shower and then one time after coming back home in the evening. Due to the reasons that there is no place to change, the place is too dirty even if it is available or there is no place to dispose even if they have changed, they do not change napkins outside the house. So, the reality is that women are living under the condition that they cannot change the cloth napkins or sanitary napkins even though they hope to do.

And some women live in a house without a toilet inside. They take the risk of toileting outside early in the morning or at night so they are not seen by male. Under such circumstances it is quite doubtful that they can use the sanitary napkins in the correct way. It is desirable for increasing the usage quantity that the good lavatories will be widely available so they can safely change the cloth or sanitary napkins.

Therefore, we can expect multiplier effect from JICA's projects for building lavatories and our business plan of sanitary napkin penetration by collaborating in the education for hygiene, which will be done by JICA in future, and the education

for menstruation and by sharing each knowledge on the baseline researches.

9.2 How they match with Japanese enterprises

JICA has many projects in each developing country such as the preparatory research for collaboration, their own projects and other projects for the country. So, suspecting that the Japanese companies have issues in developing countries and making a business plan to solve those issues, JICA is promoting collaboration among Japanese companies so that each company can utilize their own knowledge or system to solve the questions which they cannot do by themselves. Staff at JICA's office in India introduced a collaboration idea with Ricoh for this project, and we could share information and Pilot with them. In spite that there are items of secrecy agreements between a company and JICA, it is still desirable to promote the collaboration between companies for sharing information and Pilot, because we suspect there are redundancy and overlapping of information with researches.