

Social Return on Investment (SROI) of Social Interventions in Parsa East and KantaBasan Coal Blocks, Chhattisgarh

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Abstract

Over the years there has been a growing realization that mining firms should undertake strategic investments within society that add value to their business while resulting in sustainability in local areas within which their businesses operate. This study conducted Social Return on Investment (SROI) for Corporate Social Responsibility (CSR) spends in Parsa East & Kanta Basan Coal Blocks, Surguja (CG) and evaluated the impact and efficacy of CSR spends done so far on society, environment & economy. The social value created through education goes a long way in developing career of students. The low SROI value generated, i.e., 1.4 is an indicator of Adani Enterprise-Natural Recourses (AEL) spending much more amount on providing good English education. It is suggested to keep track of students studying at Adani VidyaMandir after they pass out completing the education till 12th standard and also thereafter till the students get their desired job roles. The SROI value of 7.61 in livelihood (Annapurna) is an indicator that most farmers are adopting the new techniques promoted under the project. The efforts of Adani Foundation in providing skills and thereafter providing placement support has been creating profound value in the lives of trainees as well as in their families. This is visible from the SROI value of 4.3. The efforts in creating women's cooperative are immense in empowering more than 250 women through various businesses, initiation of new businesses and carrying out activities on their own through Self-Help Groups. The SROI value of 6.4 shows that good value is created by efforts of AEL. The Mobile Health Care Unit (MBCU) and dispensary are serving people in providing general treatment with free medical check-up and medicine to people from 14 villages. Along with health check-up, awareness generation is an important aspect of health, which is supported by SuPoshan and Sanjeevani-W facilitators. The SROI value of 7.89 shows that there is profound impact on the health aspects.

Keywords: Mining, Social Return on Investment, CSR, Society

Introduction

Over the years there has been a growing need for businesses to account for the economic, social and environmental value which results from their operations. Organizations particularly within the not for profit sector are often confronted with such investment projects for which it is tough to quantify the social and environmental gains. With the help of SROI (Social Return on Investment) these organizations can easily include such impacts within the project assessment. SROI being a comparatively new term has fewer than 15 years of existence within which there have been efforts by international as well as multidisciplinary team to improve it. Despite its significant popularity it

is important to highlight that over time such approaches have been developed (Phillips and Phillips, 2007; Pathak and Dattani, 2014). Concept of SROI is based on an integrated approach which includes all the positive as well as negative impacts of the project with regards to economic, social and environment (Arvidson et al, 2013; Krlev et al., 2013).

It is argued that mining firms must make strategic investments in society, which add value to business while resulting in sustainability in local areas their businesses operate (Esteves, 2008). Mining firms enjoy access to resources in return the local communities receive employment, rent for land, greater expenditure for development in form of local hospitals, schools, roads. During 2009-2013 a term 'social license to operate' was coined to highlight the major risk in this sector (Dube and Vargas, 2013).

Mining firms are aware of the impact of their activities over local communities consequently they invest huge sums in social initiatives such as education, health, training, and infrastructure. This provides them with a license to operate. Nations like India and South Africa have made social investment compulsory and it is expected that other countries would also soon follow (Dhawan, 2014). Canadian mining firms are usually under public glare for their alleged misconduct with regards to human rights. A paper evaluated the human right violations by socially responsible investment (SRI) Canadian companies. It was concluded that the Goldcorp Marlin Guatemala mine's entry within SRI businesses by means of a shareholder resolve resulted in an inconsistent human rights impacts assessment (Coumans, 2012). A paper dealt with the economic analysis of two Australian mining projects namely on the Liverpool plains of South Wales and that on the Galilee basin in Queensland. The financial analysis undertaken privately projected gains to the mining firm while the economic analysis highlighted that for Australia net benefits were completely absent despite accounting for the social and environmental externalities (Thampapillai and Lodhi, 2018). AEL has undertaken CSR interventions in terms of Education, Livelihood and Health activities within the selected villages in Parsa East & Kanta Basan Coal Blocks, Surguja.

Scope of work

The scope of work of the study was to conduct Social Return on Investment (SROI) for Corporate Social Responsibility (CSR) spends in Parsa East & Kanta Basan Coal Blocks, Surguja (CG) and to gauge the impact and efficacy of CSR spends done so far on society, environment & economy. The scope of the study is limited to the following interventions:

- a) Education
- b) Income Generation
- c) Health

Profile of Project area Surguja district is located in the northern part of Chhattisgarh State of India (Fig 1). Borders of Uttar Pradesh, Jharkhand, Orissa and Madhya Pradesh states are adjoining to the district. This district has over extension between south-eastern part of Vindhyachal-Baghelkhand region of peninsular India.

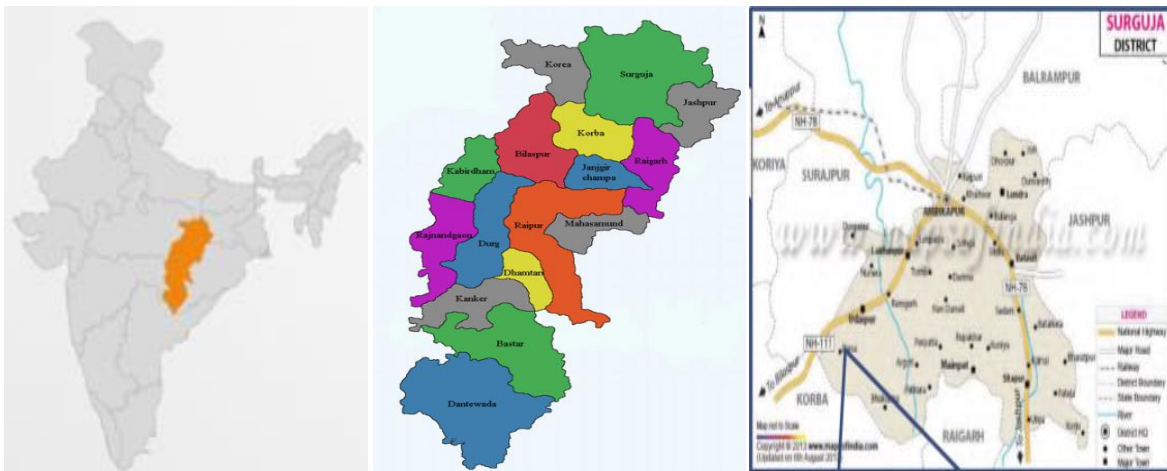


Figure 1: Location of PKB Coal blocks, Surguja district Chhattisgarh

Population and gender ratio

The CSR interventions are being implemented in 14 villages as mentioned below and therefore all these villages had to be included under the present SROI study. The profile of all the villages as per 2011 census is being presented in table 1. Considering decadal population growth of around 15% in rural Surguja, it is estimated that the population in the project villages would increase by approximately 10% in 2017-18. The total population covered in the project villages is therefore around 10,354 in 2017-18. The project villages are dominated by Schedule Tribe (ST) population which is 79% while there is hardly 2.8% population belonging to Schedule Cast (SC) category.

Table 1: Villages covered under CSR interventions

Village	Population			Population SC		Population ST			% SC	% ST
	Total	Male	Female	Male	Female	Total	Male	Female		
Shivnagar	830	417	413	9	14	754	378	376	2.8%	90.8%
Janardanpur	423	218	205	8	11	396	204	192	4.5%	93.6%
Tara	1291	641	650	19	18	749	357	392	2.9%	58.0%
Mendra	617	295	322	8	10	459	226	233	2.9%	74.4%
Salhi	1315	674	641	0	0	1154	589	565	0.0%	87.8%
Hariharpur	298	151	147	1	2	226	118	108	1.0%	75.8%
Parsa	1085	567	518	32	28	775	404	371	5.5%	71.4%
Fattepur	469	238	231	0	0	423	214	209	0.0%	90.2%
Ghatbarra	1395	710	685	34	49	966	499	467	5.9%	69.2%
Kete	561	296	265	10	10	541	286	255	3.6%	96.4%
Basen	570	304	266	0	0	516	272	244	0.0%	90.5%
Suskam	118	56	62	0	0	109	52	57	0.0%	92.4%
Saidu	119	65	54	0	0	119	65	54	0.0%	100.0%
Parogia	322	155	167	0	0	253	125	128	0.0%	78.6%
Total	9413	4787	4626	121	142	7440	3789	3651	2.8%	79.0%

CSR activities under Scope of the Study

Education, Livelihood and Health activities have been covered under the scope of the study. The details of the CSR interventions are presented below

Education

i. Adani Vidya Mandir-Adani Vidya Mandir (AVM) was established in 2013 at Surguja as a part of CSR of Rajasthan Rajya Vidyut Utpadan Nigam Limited for meeting the educational requirements of students within the project area (villages in the core and buffer). This school has been designed according to the AVM model. It provides quality education which is free of cost to the under-privileged students residing in the area. Recently, the school has shifted within its newly constructed state of the art building in Dewal Para. During 2017-18, school had strength of 561 students which included 318 boys and 243 girls. In addition to education, school emphasises on extracurricular activities such as sports, arts and crafts, music, cultural events. School also provides for meeting the nutritional requirements of its students. Nutritious meals at midday to the students are provided by the foundation in association with Mahila Udyami Bahuddeshiy Sakhari Samiti.

ii. Sankalp coaching- Adani Enterprises Limited as a part of CSR of RRVUNL has been running Coaching Classes “Sankalp” for the provision of extra tutorial classes for the students of classes 10 and 12. These coaching classes prepare them to face the competitive examinations and also enable them to secure well in their board exams. During 2017-18, Sankalp classes were held within the Tara and Salhi villages. In total number 73 students were part of the classes from the seven villages 56 belonged to Std 10 while 17 students studied in Std. 12.

b. Livelihood

i. Annapurna- Adani Enterprises Limited has introduced various initiatives targeted at improving cultivation, forming cooperatives and motivating the farmers for use of modern techniques. These initiatives are location specific, based on their need and participatory in nature however, the core strategy remains productive agriculture. In project villages of PKEB mines, Adani Foundation introduced SRI technique of rice cultivation, vegetable farming and wheat cultivation etc. through partnership of agricultural department. In Surguja, Adani Enterprises Limited organised farmers and formed 41 Kisan Club with 500 farmers through sustained efforts. The efforts are on to organise the Kisan clubs as a producer company, which will bring profound change in agricultural economy of the area and in lives of several farmers in the project villages.

SRI Technique- implies as the System of Rice Intensification which is an agro-ecological technique focused on increasing the rice productivity through the modification of its management (fig 2). SRI is based upon the cropping principles focused on notably decreasing the plant population but improving the soil conditions, methods of irrigation specifically for roots along with better methods for plant establishment. Hence, this technique needs lesser input but results in greater output. With SRI the, agricultural productivity (on an average) is increased by 33% while the farming expenses decline by 32%. To promote organic farming with the use of SRI technique,

AEL, in association with the concerned Block Agriculture Departments, frequently undertakes farmer training programmes. Within Surguja, this technique has been introduced to 78 farmers occupying 128 acres of farmland.



Figure 2: SRI Technique

Vegetable cultivation- Adani Enterprises Limited promoted vegetable cultivation (fig 3) in the project villages and distributed seed to 258 farmers in the year 2017-18. The vegetable cultivation has not only provided them additional income but has also assured availability of home-grown vegetable which provides nutrition to the family for most part of the year.



Figure 3: Vegetable cultivation

Wheat cultivation -Wheat cultivation is not very popular in the project villages of PKEB mines. With support from agriculture department, farmers were trained and were provided with seeds to grow wheat. The farmers were provided regular support by AEL team. 72 farmers were provided support in the year 2017-18.

ii. Women's cooperative

With sustained efforts of AEL team, Mahila Udyami Bahuddeshiy Sahakari Samiti was formed to strengthen Self-Help Groups (SHG) formed by the team in the project villages.

Women's group are implementing income generation activities as business models such as Tailoring, Mid-day meal at AVM, mushroom cultivation and are in the process to initiate phenyl making, papad, spices, sanitary pad, school van, van for water supply from water treatment plant installed by Adani Enterprises Limited as a part of CSR of RRVUNL, etc.

Tailoring production centre - Tailoring was the first business, the women's cooperative (fig 4) as a group initiated after receiving 6 months training from AEL where 63 women were trained in stitching. The women's cooperative had received contract for AVM, Gujarat and AVM Surguja in 2017-18 and successfully delivered the orders.



Figure 4: Tailoring production centre

Mid - Day Meal - The women's cooperative has involved 10 group members (fig 5) who are running mid-day meal as business activity of Women's cooperative at Adani VidyaMandir and its premise. They provide nutrition meals which includes lunch and refreshment. The cooperative got the work order through competitive bidding. The earning from the activity was used in purchasing van to ferry children to School.



Figure 5:Mid - Day Meal

iii. Adani Skill Development Centre (ASDC) – under the Project Saksham AEL and ASDC impart skill-based training to the local youth from the area (fig 6). Training is provided for developing skills as a sewing machine operator, skilled in food and beverage industry (Tourism and Hospitality), mining, electrical fitter and electrical assembly, skill training enhances their skill sets as well as employability. After successful completion of training local youth are provided the support for placement, logistical support for reaching their job location and also settling down. Youth from the area have been successfully placed in far off places like Bangalore and Tiruppur in Tamil Nadu.



Figure 6: Adani Skill Development Centre

c. Health

i. Mobile Health Care Unit (MHCU) has been deployed by the AEL of the provision of basic healthcare facilities to patients from remotely located rural areas wherein medical facilities are not available. Such facilities include free diagnosis of diseases and the provision of medicines. Even the consultation by doctors is offered free of cost. Consequently, patients save finances which are otherwise incurred on the fees of doctor's consultation, medicines as well as travel costs. Further the provision of treatment within their area reduces the loss of livelihood caused due to hours lost in travel. MHCU is provided with an entire set of medicines, the team including a doctor, a pharmacist along with the social protection official and the driver. These units have proved to be a blessing for the young children, women and the elderly populace as they are able to avail the healthcare services right at their doorsteps. MHCU provides the support in 15 project villages of PKEB mine area through Wockhardt Foundation. The MHCU has a fixed schedule and is available once a week in every village at fixed time and duration. The awareness generation about various health aspects, preventions from diseases are also carried out at the location. They create awareness and prevention of various diseases such as HIV/AIDS; blood pressure; diarrhoea; anaemia; fatness; diabetes, rabies, breast cancer; TB; malaria; dengue; typhoid; thyroid; heart attack; heat stroke; snake bite; importance of mother's milk; immunisation; basic health care and sanitation; vitamin A; anti-smoking; and family planning. A full-time dispensary is established in Shivanagar, which provides medical facility along with lab tests throughout the day all week. The patients at MHCU are also referred to dispensary whenever needed.

ii. SuPoshan – Children Malnutrition and women anaemia are widespread within our society and limit us in achieving the true potential within varied spheres. AEL's SuPoshan project tries to address both these concerns with the help of life-cycle approach involving societal based management. SuPoshan's strategy addresses both curative as well preventive aspects for decreasing the incidences of malnutrition and anaemia. Community health volunteers known as 'Sanginis' focus on bringing about a behavioural change through communicating about healthy food habits that also prevent anaemia. Conversations are held with pregnant women, feeding mothers and teenage girls along with the local women within the reproductive age group about healthy foods rich in iron. Mothers and Pregnant women along with their family members are guided for reducing malnutrition specifically focusing on the initiation of breastfeeding right after baby's birth and the introduction of additional feeding (along with breastfeeding) after the completion of baby's first six months.

iii. Sanjeevani -W this project has been executed as a holistic health programme for addressing the poor health scenario with in the villages close to Parsa Kente Collieries. It attempts to create an ambience within which people debate over health issues prevalent in the society and popularize the notions of, safe motherhood, health, hygiene and sanitation. Under the project, 11 women health volunteers known as Sanjeevani W workers are providing quality health services at the doorsteps of the society.

Methodology

The study is expected to assess:

- To what extent AEL initiatives has delivered added benefit and value to target communities
- How could AEL's monitoring and evaluation system be adjusted to better facilitate socioeconomic SROI analysis in future
- To what extent can the SROI methodology feasibly be applied given available documentation and information, and what are the challenges in this regard

Social Return on Investment (SROI) of CSR interventions a. Establishing scope and identifying key stakeholders Social Return on Investment (SROI) is a framework for measuring and accounting for this much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits.

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of INR 1 delivers INR 3 of social value.

Considering the TOR, the SORI for present study will be evaluative, i.e., conducted retrospectively and based on actual outcomes that have already taken place.

The 7 principles of SROI were kept in mind during the entire study which are: 1. Involve stakeholders. 2. Understand what changes. 3. Value the things that matter. 4. Only include what is material. 5. Do not over-claim. 6. Be transparent. 7. Verify the result.

Since it is important to have clear boundaries about what your SROI analysis will cover, who will be involved in the process and how, it was decided in the consultation with client that the SORI study will be limited to the following activities under education, livelihood and health: 1. Education • Adani VidyaMandir • Sankalp - Coaching

2. Livelihood • Annapurna – Rice, Wheat, Mushroom, vegetables • Vocational Skill Development • Women's Cooperative - Tailoring production centre and Mid-day meal

3. Health • MHCU • SuPoshan • Sanjeevani -W The process of establishing stakeholders involves determining which stakeholders will experience outcomes due to the investment, which aspects of the investment (inputs).

will be considered in the analysis, and the timeframe over which outcomes and investment are considered. The list of stakeholders for education, livelihood and health activities carried out in core and peripheral villages of PKEB mines is presented in the table ahead which was finalised in consultation with client to be included and excluded.

i. Establishing stakeholders – Education

- **Adani VidyaMandir**–

-Parents getting free education for their children were engaged through Focus Group Discussion

-Students studying at AVM during 2017-18 were engaged through Interview

• **Sankalp - Coaching Stakeholder**

-the students getting coaching during 2017-18 were involved through interview

ii. Establishing stakeholders – Livelihood

• Annapurna – Farmers cultivating Rice, Wheat, Mushroom, vegetables involved through Focus Group Discussion

• Vocational Skill Development- students were engaged through interviews and their family members were involved in process through Focus Group Discussion

• Women’s Cooperative, Tailoring production centre and Mid-day mealwere engaged through Focus Group Discussion

iii. Establishing stakeholders – Health

• MHCU - were engaged through Focus Group Discussion

• 905 women and children under SuPoshanwere engaged through Focus Group Discussion

• 860 women under Sanjeewani –Wwere engaged through Focus Group Discussion

In the present SROI analysis, farmers, women, students, trainees and patients were involved using focus group discussion and face to face interviews to gather information and understanding about outcomes they had experienced due to their involvement in the activities. The focus groups discussion provided opportunities to understand the change experienced by beneficiaries as articulated by them.

Table 2: Impact map - Education

Stakeholder and how they affect or are affected	Activity	Output	Outcome	Impact
Students Getting free education at AVM	Students provided good education in English medium in School having excellent Infrastructure. Provision of free books, uniform, food and transport.	546 students in school in 2017-18	Learning, Confidence level increase: They got good practical education along with regular studies and tasty food. Better learning level, higher confidence level and learning, feeling proud, Ability to communicate with anyone in Hindi and English. Competitive spirit and determination to do well in future like becoming IAS office, Doctor etc.	Profound impact on their personal growth and foundation for further study and career, Improved health.
Parents of students studying at AVM		Parents of 546 students	Saving on education Satisfaction that children getting good education at no cost, free books, uniform, food and transport. They feel proud, good behaviour of children, good health of children, families also learning various aspects from children as these are first generation learners for many families. These children are regular while children of govt school are not regular.	Assurance of child's good future. Overall impact in society as these are first generation learner. Families also learned from children.
Students Received coaching	Students of 10 th and 12 th standards provided coaching in Maths, Science and English to prepare for board exams	64 students in received coaching	Saving cost in coaching Learning Confidence level increase Got good marks in board exams. Learning to cope in higher studies, Improvement in performance and interest created in studies specially in science.	Profound impact on their personal growth and foundation for further study

Table 3: Impact map – Livelihood

Stakeholder and how they affect or are affected	Activity	Output	Outcome	Impact
Women's cooperative organised with Adani Foundation team	Organising the group of 250 women in a cooperative society, provided support and guidance and support to start income generation opportunities as business models	One women's cooperative of 250 members	Gained experience of implementing projects Organisational growth Employment opportunity Getting income from businesses. Gained organisational experience, confidence and capacity to earn	Formation of large platform to carry out businesses, capability to bring about social change and all aspects of development, gained respect in society, gained emancipation.
Women Working in Tailoring and Mid-day meal	Provided training and support to carry out Did tailoring and Mid-day meal as business and encouraging and guiding to initiate new activities such as Phenyl, spice, sanitary pad etc.	Women's cooperative - Tailoring – 63 trained and 32 members did business Mid-day meal – 10 members running business	Learned tailoring and Mid-day meal as business activity, developed confidence, started earning decent income, learned business skills, management, ability to deal and bargain.	Economic development, women feel empowered and developed confidence of doing business independently

Annapur na Members of Kisan club, farmers trained and growing vegetable, wheat and SRI	Organised farmers to form farmers club 41 clubs formed, organised training under govt schemes in improved cropping – vegetable cultivation, wheat cultivation and SRI method of farming. Providing seeds to farmers and providing training and regular support.	Annapurna – 500 Farmers in Kisan club 258 farmers trained 258 started growing vegetables 72 started growing wheat 74 started SRI method of rice cultivation	Learning new techniques; Additional Income, Confidence level increased; Status in society; Ability to form producer company, developed organising capability, ease in accessing govt schemes; Improvement in Health as a result of home-grown vegetable available	Economic upliftment and growth opportunity as larger scale.
Youth trained and placed	Providing free residential training to youth in 5 trades, viz., Sewing Machine Operator; F& B service under Tourism and hospitality; Mining; Fitter & electrical assembly Fitter at state-of-the-art training centre.	300 youth trained and 215 placed in job.	Started earning well. Personality development, increase in confidence, helped in grooming, behaviour change, good career opportunity.	Improved living standard Great empowerment of female trainees. Impact on society as people started sending girls for training and to far off places for job.
Family members of students	Priding placement support and handholding of placed trainees.	Parents of students trained and placed	Satisfaction for career of children, monetary support received from their children. The trainees learned English speaking, computer application and soft skills also. There was overall development in children because of training.	Better living standard

Table 4: Impact map – Health

Stakeholder and how they affect or are affected	Activity	Output	Outcome	Impact
Population - 8400 got awareness on health care Patients - 28105 footfalls at MHCU and Dispensary treated	Providing free treatment and medicine at Dispensary and MHCU and awareness on health care and prevention from diseases.	Population - 8400 got awareness on health care Patients - 28105 footfalls at MHCU and Dispensary treated	Got free and timely treatment and medicine, saving cost on treatment, satisfaction of availability of treatment, get saved of hustle of going far for treatment, saving wages (Less sick days), Improved health; Emancipation from tension / worry as assurance of available services; Clarity in treatment lead; Prevention of seasonal diseases	Assurance of good health. Prevention from chances of acute illness.
905 Women and children under SuPoshan supported under CSR	<ul style="list-style-type: none"> Community based Intervention with Community Health Workers from local communities. (Sangini) malnourished mapped with growth chart Regular inputs of THR, RUTF etc. and via Govt. Schemes Awareness generation 	118 SAM to MAM, 166 MAM to Healthy, 4 Adolescent. Severe to moderate, 87 mod. To mild, 120 mild to no anaemia, women sever to mod 4, mod to mild 225, mild to no anaemia 181	<ul style="list-style-type: none"> Reduction in malnutrition and anaemia amongst adolescent girls and pregnant & lactating women awareness about the issue of malnutrition and anaemia and related factors Create a pool of resources to be utilised for combating the issue of Malnutrition and Anaemia 	Support efforts in reducing IMR and MMR

860 Women under Sanjeevani-W supported under CSR	Providing all support under the project including handholding, health care services and awareness creation, conduct health related surveys and screenings, coordination with Govt. department	18 trained health functionaries 200 hrs training Awareness generation on health care sanitation Support to MHCU 196 pregnant women, 520 children vaccination, 144 adolescent girls served by sanjeevani team (estimated from data provided)	saved from acute illness if left unchecked, families got awareness on care of children and adolescent girls, got nutrition from project and support from govt anaemia reduction, 100% immunisation, coordination with govt. departments	Support efforts in reducing IMR and MMR
Sanjeevani and SuPoshan village level facilitator	Implanting the activities on behalf of Adani Foundation	Received training; fixed salary and performance-based incentives	Experience gain through training and implementation Satisfaction Livelihood	Improvement in living standard, confidence and respect in society

Table 5: Valuing Inputs

Thematic area	Activity	Inputs	Amount (Rs.)
Education	AVM	Running cost Rs. 2 lakh per month and cost of infrastructure Rs. 13 crore for 30 year	2,83,00,000
	Coaching	Amount paid to teachers	75,000
Livelihood	Annapurna	Agri inputs + training + hand holding Rs. 500 per farmer for veg, Rs. 1000 for rice and Rs. 500 for wheat	2,39,000
		Man-days of CSR team considering 250 days in field @ Rs.1,000 per day + Other expenses including management time and expenses Rs. 2,50,000	500000
	Skill development	Running cost Rs. 28,50,000+ infrastructure Rs. 3 crore for 30 years life + Rs. 2 crore equipment cost for 15 years life	51,83,333
		Man-days of CSR team considering 250 days in field @ Rs.1,000 per day + Other expenses including management time Rs. 250000	5,00,000
	MUBBS	MDM - training + support	60,000
		Tailoring centre Space rental for 6 months' training and production Rs. 12,000 + training master trainer salary and space Rs. 80,000 + machines Rs. 10,000 + marketing support	1,02,000
AEL Expenses Man-days of CSR team for organising SHG, formation of MUBS considering 250 days in field @ RS. 1,000 per day + Other expenses including management time and expenses Rs. 300,000		5,50,000	

Health	Adani Foundation - MHCU and Dispensary	Running cost MHCU – 2,34,500 per month and dispensary cost – Rs. 20 Lakh as doctor's salary +Rs. 15 Lakh other staff salary +Rs. 17,000 per month rent + medicine cost Rs.4,41,230	69,59,230
	SuPoshan and Sanjeevani-W facilitators	Amount paid to facilitators of SuPoshan Rs. 25,000*12, Sanjeevani-W - Rs. 2,75,000	5,75,000
	Adani Foundation team	Man-days of CSR team considering 250 days infield @ Rs. 2,700 per day + Other expenses including management time Rs. 1,00,000	7,75,000

d. Evidencing outcomes and giving them a value In this step, outcome indicators are developed and are used to collect evidence on the outcome that is occurring. There are four stages – developing outcome indicators, collecting outcome data, finalising how long outcome last and putting a value on the outcome.

Indicators are the ways of knowing that change has happened. In SROI, they are applied to outcomes as these are the measures of change that we are interested in. The indicators which are measurable for each activity outcome are mentioned ahead.

In consultation with stakeholders, expressing the indicators in financial terms were found out. This process is sometimes referred to as monetisation. For some indicators, monetisation required creativity and digging around. It was decided to use proxies, i.e., a value that is deemed to be close to the desired indicator, for which exact data was unavailable.

Outcome Indicators – Education

Expenses in good education and Money spent on coaching.

Outcome Indicators – Livelihood

Ability to pay to become member of similar big organisation

Ability to pay for learning various skills to take new initiatives like Phenyl etc

Earnings by members

Profit earned from business

Outcome Indicators – Health

Money spent for treatment - Expenses in check up Expenses in medicine Travel expenses for treatment Money saved due to saving in sick days Cost of hospitalisation

Collection of Impact Information

i. Education - In Adani VidyaMandir there are at present 640 students from LKG to 8th standard while 561 students studied in 2017-18 at AVM. Every year, one class is added as the state-of-the-art school infrastructure is prepared for studies till 12th Standard. The benefit to the community as mentioned by Mr. Rajesh Ranjan, Head CSR, Adani Foundation, Surguja, are manifold. The

students are getting quality English medium education with free transport, uniform, textbooks, notebooks, nutritious and good quality lunch and refreshments. The students are getting more than 70% marks, there is no dropouts while the attendance is more than 75%. There is competitive spirit among students and have gained confidence.

Financial proxy: Since most of the parents would have spent from Rs. 15000 to Rs. 27,000, an average amount of Rs. 20,000 was agreed in consultation with stakeholders as financial proxy for expenses for similar level of English medium education. An amount of Rs. 300 per month was agreed which families would have paid to get extra for the additional facilities available at the AVM which would have helped the students to gain the level of confidence they have achieved.

Deadweight: As the free education is available in government schools, deadweight of 30% is considered.

Displacement: As the AVM is not displacing any other activity and there is no negative impact, the displacement is considered NIL.

Attribution: The education facility provided by Adani VidyaMandir is solely from resources provided by Adani Enterprises Limited, there is no contribution of any other stakeholder and hence the attribution is NIL.

Drop-off: The impact of the learning from AVM will decrease in life and the learnings from other means would slowly take over and hence 10% drop-off is considered. For example, students are using apps for English dictionary and “Sab se Smart” and will contribute to their overall growth.

Sankalp - Coaching -the coaching was provided in Tara Higher Secondary School to 10th and 12th students for preparing for board exams from December 2017 to January 2018 in Maths, Science and English where students from project villages are coming. The coaching classes were held one hour before start of school in the morning and one hour after closing time of school, i.e., 9 am to 10 am in morning and 4 pm to 5 pm in the evening. Apart from this, extra classes were taken during sports classes, thus making three hours of coaching every day. The total coaching given was for 56 days. Because of the coaching, the pass percentage in the school has increased from 52% in previous year to 92 % this year. Out of 64 students in 10th, 48 were regular and in 12th, 16 students were regular as some of the students were from areas who lived far and had missed the coaching classes. 11 out of 64 students got 1st class in High School while in 12th standard 4 out of 16 students got 1st Class. There was improvement in performance, confidence, and interest was created in studies specially in science. The understanding of science and English also helps in understanding other subjects. The coaching of similar level will cost students around Rs. 700 to 800 per month at primary level and can go up to Rs. 1000 for 10th and 12th standard.

Financial proxy: students would have been able to pay Rs. 1500 for similar coaching hence that is being considered as financial proxy for outcome.

Deadweight: Around 20% students are good and would have gained the marks on their own.

Displacement: As the coaching is not displacing any other activity and there is no negative impact, the displacement is considered NIL.

Attribution: The coaching is provided by teachers under the CSR intervention and there is no other stakeholder hence the attribution is NIL.

Drop-off: The impact of the learning from coaching will decrease in life and the learnings from other means would slowly take over, hence 10% drop-off is considered.

ii. Livelihood - Under livelihood, Project Annapurna with Kisan Clubs, vocational training at Adani Skill Development Centre and women's cooperative (Tailoring production centre and MidDay Meal business) have been promoted in 2017-18.

There are 41 Kisan clubs formed by efforts of AEL team which has around 500 members. The farmers deposited Rs. 100 at the time of taking membership. The target is to organise 50 farmers club by end of this financial year and is aimed to create farmers producing company. The Kisan clubs and are being provided training and guidance by AEL in improved cropping in coordination with Govt. dept. Systematic Rice Intensification (SRI) technique also wheat, mushroom and vegetable were also promoted in the project villages.

Financial Proxy: The important outcome of the Annapurna project is organising them in farmers club which would be formed as Producer Company and will have major impact on lives of farmers and their families. The ability to pay to be part of a large group was considered as proxy and farmers could pay Rs. 1,000 to be part of the same.

The farmers could pay Rs. 500 at the most for the training they received which is considered as financial proxy for the training they received in SRI, vegetable and wheat cultivation.

Financial proxy for rice cultivation by SRI method was the additional income, the farmers earned. Through discussions, it was agreed that farmers have average additional income of Rs. 5,000 from SRI, Rs. 10,000 from vegetable and Rs. 2,000 from wheat cultivation last year.

Deadweight: Farmers club was not possible without the efforts of AEL, hence deadweight in this case is Nil. Few famers could have got training in improved agriculture as agricultural department could have approached 20% of farmers directly. As discussed with famers, they could have got 30% of income from the land using traditional approach, the deadweight for income from rice, wheat and vegetable is 30%.

They were not having knowledge of growing vegetables and the training from KVK organised by AEL has been helpful. The support could be equal between govt agencies and Annapurna project, however because there is regular support and guidance from AEL team hence attribution (to Government department) would be 40%. Since there is no negative aspect in case of promotion of SRI and there is no activity displaced, the displacement is nil.

Displacement: The efforts of AEL in Annapurna is not creating any negative impact and neither is it displacing any outcome elsewhere, the displacement is considered as Nil.

Attribution: As the contribution of agriculture department is important in success of agriculture, the attribution for Annapurna is 40%.

Drop-off: It is expected that there will be increase in area under production as mentioned by farmers, however learning from personal experience in rice cultivation through SRI method and vegetable cultivation will get precedent from the training and support provided under the project and therefore a drop-off of 20% is considered year on year as it is envisaged in the project that farmers will take full control after forming farmers producer company and will become self-sustainable.

New activities of women's cooperative which is registered as MahilaUdyamiBahuddeshiySahakariSamiti, were also initiated in 2018, viz., white phenyl making, Rice mill, Papad making. The women's cooperative has 250 members from different villages. Sanitary pad making is another business activity being planned to be initiated through the women's cooperative.

Financial Proxy: The women are organised in a registered society and are able to manage the business activities. They could pay Rs. 1,000 to be part of large group to run it. The women were able to pay Rs. 1,500 for training they received in tailoring, running mid-day meal business, mushroom and other businesses which are going to be initiated. Ten women in Mid-day meal earned Rs. 66,000 each in a year and around Rs. 6,00,000 was earned by MUBSS. In Tailoring business, MUBSS earned Rs. 30,000 and 32 women earned Rs. 6,000 each. The 63 women trained in tailoring are also able to earn at least Rs. 12,000 in a year. The SHG group also earned Rs. 7,800 from interest on loan provided for tailoring business.

Deadweight: Although the formation of group in cooperative was not possible without efforts of AEL, the groups would have organised in Self-Help Groups and the deadweight is considered to be 10%. In getting training, the deadweight is considered as 20% as the SHGs have availability of starting small income generation activities directly by taking bank loans available along with training under various government schemes. Women in Mid-day meal could have earned only 15% of the amount they earned by working in Mid-day meal business. For MUBSS, deadweight was considered by women to be only 10% as that much they would have been able to earn without support from AEL.

For the tailoring production centre, the deadweight for earning of the women's cooperative is nil as there was no possibility of getting such project without support of AEL. Similarly, there is nil deadweight for women earning after learning tailoring as this is their additional income.

Displacement: The efforts of Adani Foundation in women's empowerment through supporting efforts of MUBSS is not creating any negative impact and neither it is displacing any outcome elsewhere, the displacement is considered as nil.

Attribution: The Self-Help Group and availability of government schemes have contributed to the empowerment of women in the villages and was considered 20%.

Drop-off: The efforts of AEL team are to make the women's cooperative self-reliant and therefore conscious efforts are made to ensure that they do not become totally dependent on Adani Foundation, be it planning, executing or marketing of products. It was therefore considered that the impact of project activity will drop-off at the rate of 20% year on year.

Under project Saksham, an initiative of AEL, the Adani Skill Development Centre (ASDC) AEL conducts skill-based training programmes, viz., Sewing Machine Operator (SMO), F& B service under Tourism and hospitality, Mining, Fitter & electrical assembly and Fitter for the youth from the area, thereby increasing their skill sets and employability. Soft skill development is part of the training, which contributes to confidence building and behaviour change.

In the year 2017-18, 300 students have been trained and 215 were placed in jobs. The courses range from 65 days to 90 days of training. The trainees are placed in the salary package of Rs. 7,000 to 16,000 (including over time) with an overall average of Rs. 9,000 per month per trainee.

Financial Proxy: The trainees are earning Rs. 9,000 per month on an average and could pay at least Rs. 10,000 for attending such training.

Deadweight: The trainees would have earned at least Rs. 4,500 per month hence deadweight of 50% is considered for earning outcome. For amount the trainees could have paid, 30% deadweight is considered as that many trainees would have attended training under government schemes as mentioned by trainees.

Displacement: The efforts of Adani Foundation in skill development and placement of youth is not creating any negative impact and neither it is displacing any outcome elsewhere, the displacement is considered as Nil.

Attribution: 30% of the learning and ability to get placement is attributed to their education and learning from other sources.

Drop-off: As the trainees are placed in the company initially on training, the on the job learnings would help them in carrier growth in coming years, drop-off of 20% year on year is therefore considered.

iii. Health Mobile Health Care Unit (MHCU)

Mobile Health Care Unit (MHCU) is deployed by the AEL with the objective of providing basic healthcare facilities to remote rural areas to the patients where medical facility is not available. There are around 2,000 footfalls in MHCU every month and reaches once a week every village.

Financial Proxy: Based on the discussion with the communities, a minimum expenditure for one-time treatment is agreed to be Rs. 1,300 which includes travel cost to the nearest location where treatment is available, doctor's consultation fees, cost of medicine, cost of one meal, wage loss of one day.

Awareness generation on health aspects is done by MHCU as well as SuPoshan and Sanjeevaniteam which is reaching to the total population in the project villages. As per studies 12%

population has chance of getting acute illness which is prevented by awareness creation. As per the studies, average cost of one-time hospitalisation for acute cases is around Rs. 20,000 which is considered as financial proxy.

Deadweight: As discussed with communities and data analysis of footfalls in MHCU and dispensary, 20% patients come for mild treatment and could get treatment locally.

Deadweight for awareness generation is considered 30% as that many people are already be aware of the precautions from various diseases.

Displacement: As the activity is not displacing any other activity and there is no negative impact, the displacement is considered NIL.

Attribution: Since 10% of the patients suffering from serious illness are also referred to Government hospital, Ambikapur, the attribution is considered to 10%.

Attribution for awareness creation is considered as 40% as the awareness from other sources such as ANM and awareness programmes by government projects and through media will contribute to reduced illness chances.

Drop-off: The treatment is considered as one-time outcome and the patients will require continuous facility, the time period of the outcome is considered for one year only, hence drop-off is not considered.

Su Poshan&Sanjeevani – W

Financial proxy: For SuPosahan and Sanjeevani-W programmes, the financial proxy is considered to be Rs 20,000 in case of hospitalisation in case of acute illness of 12% cases.

Deadweight: In absence of the SuPoshan and Sanjeevani-W programmes, only 30% population would have availed the government facilities on their own.

Attribution: The Adani Foundation team helps ANM and Asha in achieving their goals and therefore. Their contribution is considered to be 40% in the success of the programmes.

Drop-Off: The Impact of SuPosahan and Sanjeevani-W will remain life-long but five years is considered for the study with 10% drop-off.

Modelling and calculating the SROI Thorough analysis of inputs, activities, outputs, outcomes and impacts was done and then informed judgements about how each key stakeholder group is affected by this process was made. Following steps were involved in calculating SROI:

Step 1: Analysing inputs

Step 2: Adding-up the benefits

Step 3: Projecting value into the future

Step 4: Calculation of social return on investment

Step 5: Conduct the sensitivity analysis

The SROI as calculated:

1. Education (Adani VidyaMandir and Sankalp – Coaching) – 1.4
2. Livelihood
 - a. Annapurna – 7.61
 - b. Skill development – 4.37
 - c. Women’s cooperative - 6.4
3. Health - 7.98.

Conclusion & Recommendations

a. Education i. Adani VidyaMandir the social value created through education goes a long way in developing career of students. Since the study covered students who are in LKG to VII standard, the impact will be visible long after they pass out and are successful in getting jobs as per the inspiration of the management as well as of the students. The low SROI value generated, i.e., 1.4 is an indicator of AEL spending much more amount on providing good English education with state-of-the-art facilities at Adani VidyaMandir. It is suggested to keep track of students studying at Adani VidyaMandir after they pass out completing the education till 12th standard and also thereafter till the students get their desired job roles. This will help assessing true social value, the Adani VidyaMandir is creating in the lives of students and community. Encouraging and maintaining Alumni group would be helpful in keeping track of students.

ii. Coaching Similar to AVM, the real impact of coaching will be seen in longer run when students do well in higher studies and in their career. There is also need to keep track of achievements the students of other schools in the area who are not getting similar coaching.

b. Livelihood i. Project Annapurna AEL in coordination with agriculture department has created profound socio-economic value in the project villages by promoting SRI technique of rice cultivation, vegetable cultivation and wheat cultivation. The efforts are also on to further strengthen them by forming farmers’ producer company. There are several government schemes running in the area to avail subsidies for various tools and techniques to help farmers achieve more profit. The efforts of AEL will go a long way in achieving the results as government departments required organised groups of farmers for which AEL has already created a great structure.

It is suggested to maintain information on all the activities, the Kisan clubs are carrying out in coordination of government departments which will show the impact of efforts of AEL team in Project Annapurna.

The SROI value of 7.61 is an indicator that leveraging government programmes can have exponential impact in the long run when most of the farmers will adopt the new techniques promoted under the project. The data of other farmers who have started adopting the techniques on their own also need to be collected which will show the impact of the efforts made by AEL.

ii. Adani Skill Development Centre- The efforts of Adani Foundation in providing skills at its state-of-the-art facility at Adani Skill Development Centre and thereafter providing placement support has been creating profound value in the lives of trainees as well as in their families. This is visible from the SROI value of 4.3. The tracking information of all the trainees with their earnings for at least one year is to be maintained to capture the impact created.

iii. Women's cooperative- The efforts of AEL in creating women's cooperative is immense in empowering more than 250 women. Not only the group has been successfully running various businesses but are also initiating new businesses. Apart from these, the groups are carrying out activities on their own through Self-Help Groups. The information on the same is also required to be captured to showcase the impact of efforts AEL. The SROI value of 6.4 shows that a good value is created by efforts of AEL.

c. Health- The Mobile Health Care Unit (MBCU) and dispensary are serving people in providing general treatment with free medical check-up and medicine to people from 14 villages. Along with health check-up, awareness generation is an important aspect of health which is supported by SuPoshan and Sanjeevani-W facilitators. The SROI value of 7.89 shows that there is profound impact on the health aspects.

References

Arvidson, M., Lyon, F., McKay, S., & Moro, D. (2013). Valuing the social? The nature and controversies of measuring Social Return on Investment (SROI). *Voluntary Sector Review*, 4(1): 3-18.

Pathak P., &Dattani, P. (2014). Social return on investment: three technical challenges. *Social Enterprise Journal*, 10(2): 91-104.

Phillips, J., & Pulliam Phillips, P. (2007). *Show me the money – How to determine ROI in people, projects, and programs*. San Francisco: Berret-Koehler Publishers, Inc.

Krlev, G., Münscher, R., &Mülbert, K. (2013). Social Return on Investment (SROI): State-of-the-Art and Perspectives. CSI Report. Retrieved from http://archiv.ub.uni-heidelberg.de/volltextserver/18758/1/CSI_SROI_Meta_Analysis_2013.pdf.

Esteves, Ana. *Mining and Social Development: Refocusing Community Investment Using Multi-Criteria Decision Analysis* (2008). *Resources Policy*, 33, 39- 47.

KPMG GLOBAL MINING INSTITUTE Valuing social investment in mining kpmg.com/mining
KPMG International. *Getting more out of social investment in the mining sector*. RohiteshDhawan 2014. <https://assets.kpmg/content/dam/kpmg/pdf/2014/10/valuing-social-investment-mining-v3.pdf>.

DubeOeindrilla, and Vargas Juan F. 2013. Commodity Price Shocks and Civil Conflict: Evidence from Colombia. *The Review of Economic Studies* 80 (4):1384–421.

Thampapillai, Dodo Jesuthason and Lodhi, Iftikhar, Two Controversial Mining Projects in Australia: Some Questions on Their Socio-Economic Viability (May 16, 2018). Lee Kuan Yew School of Public Policy Research Paper No. 18-07. Available at SSRN: <https://ssrn.com/abstract=3179880> or <http://dx.doi.org/10.2139/ssrn.3179880>.

Catherine Coumans (2012) Mining, human rights and the socially responsible investment industry: considering community opposition to shareholder resolutions and implications of collaboration, *Journal of Sustainable Finance & Investment*, 2:1, 44-63, DOI: [10.1080/20430795.2012.702499](https://doi.org/10.1080/20430795.2012.702499)