Annexure-VI

COMMUNITY DEVELOPMENT INITIATIVES
ACF, RABRIYAWAS

1. WATER AND LAND RESOURCES MANAGEMENT:

Ambuja Cement Ltd- Rabriyawas is operating in the part of western Rajasthan which falls under arid and dry region of Rajasthan. In the region water is a very precious commodity. The water resources are extremely limited and access to them is very difficult. Rainfall is characteristically scanty and uneven which is insufficient to fulfill the need of drinking water as well as for cultivation requirements. The climate of ACF's Rajasthan programmes area is very conspicuously extreme dry with large variations in temperature and rainfall. The maximum and minimum temperature so far recorded 47 C and 1 C respectively. Average annual rainfall in this area is just 350-400 mm only. Ground water in some part of the area is also affected by higher concentration of dissolved salts and fluoride. Famines are frequent, often causing mass migration of populations. The soil condition is extremely poor and mainly characterized by sandy and sandy loam only. Drinking water security and water for irrigation in the area required more attention. For drinking water, the community of the surrounding villages was depended on village ponds and open dug well only. Cattle also depend on the same ponds for their drinking needs.

The major portion of the district is covered by sand. The geology is evidently based upon scattered out crop. The topography is generally even. North western region is covered with large sand dunes extending some times in a continuous series. The district is devoid of high hills. Scattered low lying hills are found in some places.

Agricultural is the main occupation for the farmer in the Pali district. Most of area in the district comes under the rainfed region. The soil health in the area is extremely poor with very low nutrient and organisms. The presence of the alkaline and salinity in the soil reduced the productivity. Low & scare rainfall in area is the tragedy for the farmers. In some of the area community is bound to consume the water with high level of fluoride and alkaline content too. Agriculture is mainly seasonal and rain fed. When rainfall is less, it is even difficult for the farmers to save their Kharif (monsoon) crop too. There is no facility to provide support irrigation. The overall impact of lack of water reflected on all aspects of people's lives.

In addition, frequent drought deteriorated the quality of life across the proposed area and is not be categorized in satisfactory position. In the mentioned situation of socio-economic scenario, the vulnerable community migrates to the cities to fulfil their minimum subsistence during the lean period or depends upon the famine work undertaken by the State Govt.

Under the above circumstances ACF is actively working for the development of the natural resources from seven year.

1.1Pond De-silting:

The community in the area is largely depended on the traditional ponds which were dug a long time ago. Over a period of time most of the water bodies filled up with silt and surface water retention capacity of the ponds was affected drastically. ACF started the work of De-silting and Renovation of Ponds to restore the ancient reservoirs and enhance the storage capacity of the ponds. The de-silting work was carried out with participation of local community. Experiencing the results and benefits of these efforts, community participation has been substantially increased. ACF provides technical and financial support for execution of projects while transportation of dug out soil is carried out by community through deploying tractors voluntarily.

The deepening of existing ponds has been proved as cost effective and there is no need to create/construct additional and expensive water bodies. Agriculture is mainly seasonal and rain fed. When rainfall is less, it is difficult for the farmers to save their Kharif (monsoon) crop. There is no facility to provide support irrigation. The water harvested in such ponds serves two purposes:

1) Recharging of ground water to increase water table and to improve quality of water and
2) Support irrigation and if more water is available Rabi (winter) crops could also be cultivated.

During the Current Year, ACF de-silted 28 Ponds including 2 Check Dam Excavation work in 20 Villages of eight Gram Panchayat in the project area of Rabriyawas. Due to this intervention, the water storage area in the region is increased by 4.08 MCFT. Therefore, Total 88 Ponds de-silted up to this year in the project area with 86.57 Mcft Storage Capacity.

At the same time soil excavated (1, 04,959.00 cum) in the process is highly fertile and transported and used by the villagers to enhance the productivity of their farms. For the work the cost of excavation is of Rs. 20.0 /cum was as a ACF support

while the transportation of soil on the basis of Rs. 55.55 per cum provided by the community itself as their contribution.

Drinking water problem in most of the project villages addressed due to this innovative way of water harvesting in the region. In some of the village there is acute problem of fluoride in ground water, in these circumstances due to de-silting of pond only community is able to get the safe drinking water in the area.

1.2Underground Dyke/ subsurface dyke (A sandy soil bed river basin structure)

A sub-surface dyke is a technically sound and cost effective method was applied to deal with this problem. Instead of building structure on the surface of the earth, we chose to build structures deep inside the river bed. A deep vertical trapezoidal cut about 10-15 feet was made at an appropriate point at the river bed. At some distance, another such cut was made. A thick polythene sheet was tied across this cut to make vertical cavities. The silt that was removed from the river was filled in these cavities. Thus two "walls" were made under the surface of the flowing river. Subsurface dykes constructed by ACF in semi-arid region of Rajasthan for the conservation and utilisation of groundwater are a unique feature of project area of Pali district. It is a living example for ground water conservation technology for sandy bad rivers in the arid and semi arid region of Rajasthan. The success story of the sub-surface dyke has demonstrated that it is one of the most feasible methods for the conservation and exploitation of the ground water resources in sandy bad rivers in the district. This is a very cost effective and innovative solution of checking the sub-surface in the sandy bed rivers in the area.

Sand rivers are drained of water within a few weeks after flooding occurs, unless water is trapped in the sand by protruding underground barriers such as impermeable rocks or upward protrusions of clay or murram in the floor under the sand. Such invisible barriers are known as underground dyke that can be located by observing drier vegetation on river banks.

In the year 2007-08 to 2011-12 Series of subsurface dikes were constructed at Lilari River passing through various villages of RAS gram panchayat and Dayalpura Village of Jaitaran Block of Pali district with the objective of conserving ground water. The experience of series of sub-surface dykes on Lilari River indicated that subsurface dike was an efficient barrier to arrest the subsurface flow of water and conserve ground water. The rate of depletion of drainable water in the catchments area due to the typical undulating topography could be efficiently arrested by the dike. The dike resulted in the maintenance of higher water table in the catchment area for a longer period of time. The water received through summer showers could also be efficiently conserved in the catchment area by the dike. Plastic sheet were also used to provide more compacted layer and as a cheaper alternative to masonry structure.

In 2011-12, ACF has constructed 02 underground dykes on same river Lilari in passing through village Kesarpura and Patan then leading to Jaswant Sagar Dam in Bilara Block of Jodhpur District. Due to this intervention, 26 wells get recharged in the 02 project villages. We have constructed the series of underground dykes on the river to increase the groundwater table in the area. 369 beneficiaries member will get benefited due to recharging of their wells and subsequent use of the water for irrigation purpose in term of mono cropping to double high valued crops i.e Cumin, Green Gram, Easbghol, mustard and wheat and vegetables i.e chili, onion, cabbage, Brinjal, tomato and garlic.

During the current Year, nearest wells/tube wells around dyke structure were benefited and average water column in surrounding wells increase by 10-12 ft and additional 97 Ha area cultivated due to availability of water in the wells during Kharif session. 37 Ha area come under cultivation during the Rabi session due to assured irrigation water availability in the downstream of the Underground dykes.

1.3Check Dam

"Check-dams" are small barriers built across the direction of water flow on shallow rivers and streams for the purpose of water harvesting. The small dams retain excess water flow during monsoon rains in a small catchments area behind the structure. Pressure created in the catchments area helps force the impounded water into the ground. The major environmental benefit is the replenishment of nearby groundwater reserves and wells. The water entrapped by the dam, surface and subsurface, is primarily intended for use in irrigation during the monsoon and later during the dry season, but can also be used for livestock and domestic needs.

In the year 2011-12, ACF constructed one extension wall of Modiya Naka check dam near petrol pump for diverting and storage of water. Due to this wall, water will be made available for at least 2-3 month after the monsoon will over in the area. It will solve the drinking water

problem as well as increase the irrigated area in the downstream of these structures. ACF also renovated 2 Check dam in Patan, Kotariya Villages for improving the more life of structure and increases the maximum water storage.

1.4Khadin (A traditional runoff farming system)

A *khadin*, also called a *dhora*, is an ingenious construction designed to harvest surface runoff water for agriculture. Its main feature is a very long earthen embankment built across the lower hill slopes lying below gravelly uplands. Sluices and spillways allow excess water to drain off. The *khadin* system is based on the principle of harvesting rainwater on farmland and subsequent use of this water-saturated land for crop production. This structure is very useful for converting low with low fertility to high fertility for next (rabi) crop only. During the monsoon session this land put under inundated condition by putting the earthen embankment across the slop. After the monsoon and in the rabi session, land can be used for planning the crops wich required high moisture content in the soil i.e gram.

In year 2011-12, ACF constructed 02 Khadin structures in Rabriyawas, Ballupura Villages. The construction material for masonry waste weir work contributed by the community as their contribution. The total community contribution comes approximately 30% of the total structure cost. 49.50 Ha areas come under direct cultivation of high value crops due to this i.e mustard & gram in Rabi session without any irrigation. Total farmer benefited due to this technology is of 17 farmers.

1.5Well Deepening:

In this current year 2011-12, ACF has deepened 19 well in the project villages. This is a very effective technique to harvest the surface runoff and their subsequent use for drinking as well as irrigation purpose in dry session too. This operation we have observed that the water level have been increases in the well therefore the farmers taking benefits through this intervention.

Through this intervention, Farmers are irrigating the field more than 2 to 3 Hours. We have noticed huge impact on ground water table level which resulted in increased area of cultivation.

1.6 Farm Pond:

Farm ponds are an important form of water storage for many areas across the project villages. This method is useful for Storage of water on the own farm of farmers. Farm ponds have been around for years providing water for live stock, irrigation and watering the crops or garden. Farm ponds have become much involved as the years passed and now are used for our recreation, fishing, swimming, a source of refuse for wildlife and a place to reflect and relax as we watch the life grow in and around the pond. Looking to the long dry spells in the area resulting the crop losses in the huge quantity, ACF has replicated the model of farm pond on the farmer land.

In this year 2011-12, ACF Constructed 3 Farm ponds in 105 Bigha of land belonging to farmers at 2 project villages i.e. Pratappura and Ghodawar with the storage capacity of one farm pond about 1500 Cum. It has an inlet to led water enter who will come through upper catchment area and an outlet to lead the excess water out. It helps the ground water recharging and prevents soil erosion. It is also an accessible source of water for irrigation for farmers and facilities drip irrigation systems.

1.7 Farm Bunding With and Without Masonry Waste Weir:

Farm Bunds are constructed on Agriculture land with the aim of arresting soil erosion and improving the soil moisture profile. Ideally, Bunds on Farms should be made on the contour line but this creates several problems for farmers. Contour Bunds Divide the field into irregular sections. Due to these difficulties, ACF Started soil and water conservation practices as a farm bunding along the field boundaries. The water Harvested in such practices of soil and water conservation serve two purposes:

1) Control of Soil Erosion
2) Improvement of soil profile

Farm Bunding is a measure practice of soil and water conservation practices for improving the land of farmers. Bunds are also built according to the slope of the land, allowing rain water to flow into the farms. Bunds increase water retention capacity into the soil, enhance its health and increase the water level. The farmers not only getting direct benefit through this structure but also they are taking good healthy crop from and receiving the good amount through market

In this Year, 2011-12, ACF constructed two types of farm bunding according to Water availability. Total 29 Farm Bund constructed in the Keshrapura, Patan, Amarapura, Balada, Sewariya, Rabriyawas, Kharwa and Ras Villages. The 21 Farm bunding has been constructed without masonry waste weir and 8 Farm bunding make with masonry waste weir. Therefore, the total area covered by this structure is 50 Ha. The cost of earthen farm bunding in masonry waste weir structure in farm bunding is measured as a community participation which is about 40% of the total cost of the structure and another is without masonry waste weir; Community participated as a Labour and provided material which is about 75% of the total cost of the structure.

1.8 **WST:**

In this year 2011-12, ACF constructed 42 Water storage tank in 11 villages i.e. Amarpura, Ras, Patan, Ballupura, Rabriyawas, Balada, Gyas, Sewariya, Kotariya, Dayalpura and Roopnagar; Benefiting 257 Household.

1.9 Gabion Structure:

ACF have taken the initiative step in gabion structure for prevents Soil erosion in the hilly area. This is a kind of check dam being commonly constructed across small stream to conserve stream flows with practically no submergence beyond stream course. The boulders locally available are stored in a steel wire mesh and are tied up in the form of rectangular blocks The Gabion structure should be constructed on slope. Gabions are free-draining walls that are constructed by filling large galvanized steel baskets with rock. Gabion walls are in many applications the most cost effective structural wall available.

Gabion baskets are available in a variety of different sizes. They come in 1/2 or 1 meter high, and 2, 3, or 4 meters long. There are several types and colors of rock available from common river type round rock, to multi-colored light and dark fractured rock. Flexibility is an important benefit of any gabion structure. Since the baskets are constructed of galvanized mesh wire and filled with rock, the flexibility of a gabion structure allows it to withstand pressure without deforming, cracking or breaking as in the case of concrete and other materials. There are very few limits when it comes to the construction of a gabion wall. The excess water overflows this structure storing some water to serve as source of recharge. The silt content of stream water in due course is deposited in the interstices of the boulders to make it more impermeable. ACF Constructed Six Gabion structures in series at Patan and Gopal Dhuni, Balada Villages.

1.10 Training/Exposure Visit:

Seeking to update our staff on the technical parameter and with latest information on water resources, ACF has organized training on water resources development. During the current year, ACF organized five training program on water resources and discussed on the ancient component of water resources.

1.) Training Cum Exposure Visit was conducted for understanding the Concepts and Role for Water Users Association at Jal Bhagirathi Foundation, Jodhpur.
2.) A Training provided WUAs member and Community of our project area on the Concept and Role of Water Management and Water Budgeting issues at CTDC, ACF-Rabriyawas.
3.) Training provided by the Mr. Shanti lal Bhapana, Ret. Professor of Agriculture Department to WUAs member and Community of our project area on the Concept and Role of Water Management and Water Budgeting issues at balada Villages.
4.) Exposure Visit was conducted for the improvement and updating knowledge of Staffs, Supervisors and Contractors ay CSWCRTI at Dehradun State.
5.) Two Exposure Visits were conducted at Sadguru Foundation on the Concept of Watershed and Water Resources Management.

ACL commitment

2.1Construction of Infrastructure (Road/ Goshalla):

Rural road network is the catalyst to increase the rural employment opportunities, to have better access to regulated and fair market, health, education and other public services and thus to bridge the rural-urban divide and pave the way for economic growth. Construction of C.C. Street in project area is more important activities for minimizing the pollution, safety of health etc.

During the Current Year 2011-12, ACF Constructed Total 1516 meter of C.C. Road in Villages i.e. Balada, Rabriyawas, Aamarpura, Patan, Keserpura and Jaitaran. ACF also gave the support in Goshalla at Pratappura Village as a Wall Boundary and Room construction.

2.2 Support to community:
In the year 2011-12, ACF Supported community through supply of 750 Tanker in 9 Villages i.e. Sewariya, Kotariya, Ras, Balada, Amarpura, Rabriyawas, Pratappura, Gyas, Keserpura of our projects area. ACF supported with one Bore well at Primary School, Ganeshpura village for the purpose of drinking water. We connected street of Balada through 200 meter pipe line for supply of Water with the PHED pipe line.

2.3Semi Pasture Land Development:
ACF developed Semi Pasture land on 250 Bigha at Gopal Dhuni in Balada Gram Panchayat and 50 Bigha land at Pratap pura. We Planted 3000 Plants of Dhaman Grass, Neem (*Azadirachta indica*), Kaner, Karanj (Pongamia glabra) in both villages.
Formation of water user Association: Water user association is a association of members from the community who make sure judicious use of water, creating awareness about the water scarcity in nut shell do water management. Till now 5 WAUs have been formed in 5 villages with Average 15-16 members in it.

3. Agriculture Development :-
ACF has been intervening in agriculture sector in Rabriyawas since 2002. ACF has landed a hand to farmers in combating the adverse condition of farming through various interventions. like Wadi development, promotion of Vermi composting, Soil reclamation, Drip irrigation, sprinkler irrigation, seed productions and organized trainings and workshop for farmers to increase their awareness.

3.1 Wadi Development :-
In this area recurrent droughts and water scarcity are prime hindrances for farming which eventually end up in poor financial conditions of farmer. But wadi can successfully be developed in this region by planting the plants having high drought tolerance and low water intensive capability which leads to sustainable income generation. Wadi as sustainable income generation occupation is widely promoted by the ACF and accepted by the farmers. After looking to successful wadies more farmers are coming forward and demanding to set up wadi in their field. Community contributes in wadi development by Pits digging work, Pits filling work with fertile soil/ organic manure, plantation work along with Rs 1500/- as cash contribution for one acre Wadi registration while ACF provides Plants, filling material, supplementary vegetable seeds and technical guidance through regular monitoring. In the year 2011-12, ACF has promoted Small orchard in 13.2 Acre area in 3 project villages with low water required horticultural plantation of Total 1455 plants i.e. Ber, Lemon, Gunda, with the 8 small and marginal farmers.

3.2 Support to old wadi-
Under this program ACF have support to old wadi's (two to three years) for the better take care, Plant protection, nutritional management and optimum water requirement of the crops. Farmers are taking the necessary agro-input on the cash contribution. Beside this the farmers are getting financial and technical assistance for the fencing for their orchards. Under this program 70 acre old wadi area has been supported in 11 villages. Out of the 70 acre wadi's 25 acre wadi's started fruiting. Farmers are selling the Ber into the market and getting food prices for their crops.

3.3 Drip irrigation:-
Drip irrigation is being promoted by ACF with the motive to supply the entire field uniformly with water, so that each plant has the amount of water it needs, neither too much nor too little and wadi could be developed by requiring minimum water. We have also installed the drip irrigation system under the scheme of **National Horticulture Mission** (NHM) with availing 70% subsidy to 2 very successful Wadi to promote these as a model Wadi in the area. Out of remaining cost is born equally by ACF and Farmer on 50-50 basis.

3.4 Vegetable Cultivation:-
As vegetables are short duration crop, these are more suitable for Mixed and intercropping. For instance some of the species like Tomato, Brinjal, and Chili are ready to harvest within 45

to 60 days after sowing. This leads to higher intensity of cropping and more profit per unit area. This year Vegetable cultivation was promoted in 125.0 acre area with 35 farmers from 8 villages in the area. Crop i.e. Cluster bean, Tomato, Chilli, Bitter Gourd, Bottle Gourd, Sponge Gourd, Okra, Cucumber promoted with the farmer with little water availability. ACF encourages farmer through providing improved quality of seeds to farmer on 80% cost sharing basis and regular monitoring of their farm to reduce the rate of being at hazard.

3.5 Participatory Crop Varietals Trial:-

ACF has collaborated with various agencies Viz. National Seeds Corporation, Gujarat State Seeds Corporation and Rajasthan State Seeds Corporation& private suppliers to provide improved quality seeds to farmers as seeds are the innermost input of farming. We have taken up Participatory varietals trial of major crops of our area like- Moong, Bazra, Guar& Til in Kharif 2011-12 .In the Rabi season Wheat, cumin seeds were provided to the farmers. The main objective of the trial is to compare different variety of a crop on same field and chose most preferred variety (Based on farmer's perception) for further recommendations to farmers.

Selection of recommendable variety is done on the basis of farmer observation about that variety. This year farmers were provided numerous variety of crops out which we found G-4, SML-668(mung), as recommending variety of given crop. So far in pearl millets we have provided the prevailing hybrids of Nandi seeds Private Limited viz. Nandi-61 and Nandi-62, both the varieties were recommended by the Ex principle scientist of All india Coordinated Project on Pearl millet, Jodhpur. Where as in Rabi season only cumin seed Var- GC-4 has been provided to the farmers for demonstration purpose. Crop trial program has taken up in 176 acre area in 16 project villages.

3.6 Soil Reclamation (Gypsum application) under Govt. scheme:-

The Project area has impoverished soil structure, higher rate of fluoride content which causes adverse impact on farming. ACF has put this issue on prime concern this year 56 soil samples were collected and sent for the chemical analysis. In this regard Total 9140 bags (50kg) of Gypsum were provided to 28 farmers availing 50% of subsidy under the Soil reclamation scheme with the collaboration of Agriculture department. Remaining (50%) cost was born by ACF (12.5%) and Concerned farmer (37.5%). Constant Gypsum application in the field reduces fertilizer requirement and improves soil structures.

3.7 Seed Production Program:- Under the seed production program ACF has linked up farmers with the agencies like National Seeds Corporation (NSC), Rajasthan State Seed Certifying Agency (RSSCA) and Rajasthan State Seeds Corporation (RSSC) for efficiently carrying out the seed production program. Every agency has certain accountability i.e. RSSCA is for certification of different released crop varieties in Rajasthan, NSC and RSSC for production & supply of good quality seeds to farmers through cooperative societies. Under this farmers were endowed with certified seeds and recommendation of expert of the agencies by timely organized expert visit to farmer's field by the ACF. This year seed production program was carried out with 89 farmers of 12 villages. During Kharif 2011-12, we have taken up seed production of Moong (Variety- RMG-62) Til (RT-127), Wheat (Raj-1482) and Cumin GC-4.

3.8 Training & workshops: - every technique needs to be updated after a certain time period and so do the human beings. Several exposure visits and trainings were organized to promote the advanced and up-graded agriculture and horticulture practices in the project area.

ACF has untaken quite a 'bit of trainings and exposure visit at its Community training & development center, Rabriyawas. Following are the execution details :

- Contentious training sessions on agricultural technologies by progressive farmers/ scientist etc. in this regards 4 training has been conducted on Seed production program.
- Three, one day training cum orientation has been organized for the members of Primary producer company members.
- Two, One day training for the bio-gas maintenance at the CTDC, Rabariyawas.
- Three one day training program for wadi program conducted at CTDC, Rabriyawas.
- Two, one day training on the Azola production technology was conducted At ACF demonstration farm and farmers village.
- Four, one day training program on home-made balanced cattle feed and animal breeding and better animal husbandry practices were organized for the farmers.

- Two day exposure visit to the farmers for Primary Producer Company, at Banwada. The visit was organized by the ACCESS Development Service.
  Demonstration farm is being constructed at the ACF Rabriyawas to promote improved crops varieties and up-graded techniques. Following mentioned techniques were undertaken by the ACF around the year.
- Fodder demonstration for different varieties i.e. Lucerne, Oat, Kasni, Swweet Sudan grass, Rijka Bajari, Sorghum etc.
- Orchard development of different fruit crops i.e. Ber, Gunda, Karonda, Guava and Spota , etc. with advance irrigation system i.e.Drip irrigation and pitcher irrigation system.
- Varietal demonstration trails on Mung bean having – 5 varieties viz.. G-4, RMG-62, RMG-492, WML-668, RMG-68 and K-851.
- Demonstration on Medicinal & herbal plantation (Aloe Vera, Sonamukhi, Aswagandha)
- Vegetable –varietal demonstration on varieties suitable for the semi arid area the crops were – Cluster bean, Lady's finger, round gourd, ridge gourd, Cow pea, Bottle gouud, Brinjal, tomato, Chilly, cultivation.
- Vermi compost/ Super compost/Compost unit
- Dairy unit with improved cattle feeding technologies
- Nursery development.
- RRWHS linked with ACF building.

4.Animal Husbandry :-

Animal health & vaccination Camp:-

In the year 2011-12, 4 animal health/vaccination camps were conducted in 4 different project villages in coordination with Govt. veterinary Department. Animal Husbandry officer from respected area involved during the camp. Through these camp about 5786 animals got inoculated. Vaccination of Foot& Mouth, Hemorrhagic septicemia, Black Quarter disease in large animals (Cow, Buffalo etc) and Enterotoxaemia in small animals (Sheep& Goat) were performed.

4.1 Breed improvement through Artificial Insemination (AI) :

AI is the only cost effective technique for breed improvement in the area. Artificial insemination (AI) services are being made available with the collaboration of India Gen (a unit of NDDB), JK Trust Gram Vikas Yojana and Govt. of Rajasthan Animal Husbandry Department. So far the total number of AI performed around the year is 95. Almost 50 % of AIs were done in the buffaloes for the breed up-gradation. Up-gradation of Indigenous breeds like gir, exotic breeds like HF and Jersy has also been performed. Regular follow up for the 21 days and PD is being done for better results.

4.2 Fodder Development :

Keeping, Scarcity of green forage, in view ACF has promoted the improved varieties of various fodder crops like (Rizka, Bazri & Kashmira Jowar Chari) with 119 farmers and in 210 acre area. As a result of this intervention farmers are getting good quality of the green fodder almost round the year.

4.3 Dairy Development with innovative cattle feeding practices:

During 2011-12 60 units of attached cattle feed cum drinking water system promoted in 12 villages. 45 farmers were given training about preparing the home made balance cattle feed using their own resources. We have been motivating & organizing farmers for Dairy farming. As a result of our constant efforts 02 more Dairy has been started this year at Balad., Azola is an aquatic plant, used as fodder, which is having high protein content. In this regard 2 fields training and 26 field demonstration has been conducted at the farmer's field.

4.4 NON CONVENTIONAL ENERGY SOURCES (NCES) :-

in ordre to preserve conventional energy resources ACF has been promoting 2-3 cum Deenbandhu model of biogas plant in the project area. The daily requirement to feed the system is about 40-60 Kg of cow dung which can be easily meet out from 2-3 cattle only. In the year 2011-12, ACF has successfully installed 20 biogas plants in the area. An average cost for construction and operational bio gas plant is Rs 12500/- out of this 8000/- is subsidy given by the Department of Renewable Energy Sources, Government of India and rest 2000/- as meson charges 2500/- cost share by farmer.

4.5 Kisan Club-

KC is grassroots level informal forums of farmers. The broad objective of setting up Kisan Clubs to enable them to facilitate transfer of technology, strengthen agricultural extension services, undertake collective purchase and distribution of inputs, production and marketing, capacity building of members, to act as Business Facilitators (BFs)/Business Correspondents (BCs) for banks, formation of Self Help Groups (SHGs), Joint Liability Groups (JLGs), Producers Groups/Companies, Federations of Farmers' Clubs, undertake community related works, and assume the role of a leader. They are also play very important role in sustainability of programs. During this year 18 clubs have been formed and four Kisan club has opened their bank account. Out of the four two has been opened their vendor code with Ambuja Cement Limited, Rabriyawas for further business operation under the AFR. 18 farmers club has been registered with the NABARD, Pali for getting the financial assistance and other benefit related to the agricultural development.

5. HEALTH & SANITATION

5.1 Mobile Dispensary:

Community of plant surrounding villages neither have access to fare medical services nor they can afford the medicine expenses. All the villages fall in interior areas and have less means of transportation that swells up the trouble of community. ACF decide to provide free health facilities at their door step as they do not have enough transportation facilities. A mobile dispensary is regularly visiting with the qualified doctors and trained nursing staff providing regular medical health services in the ten neighboring villages 5 times in a month. People of nearby villages come at predefined venue and time for treatment. So mobile dispensary is covering 17 villages and in year 2011-12, total 6244 patients were treated.

5.2 Village Health Functionary: (24X7 primary health care at village level)

Mobile dispensary visits the village once in a week so for the remaining days ACF has appointed 30 women from the community in 27 project villages /hamlets as VHF to provide 24 hours primary curative and preventive health services. VHF provides support to community for better health and Sanitation, ensures proper vaccination of mother and children, ANC services with close collaboration of concern PHC, promote intuitional delivery, strengthen of VHSC, Joint meeting with ICDS & Health department, referral services, create awareness among social taboos, attend Panchyat meeting to promote women participation in panchyat, conducting Khelwadi to ensure health & hygiene practices among children. VHF also working as Peer Educator on HIV/AIDS programme. During the year 2011-12 VHF attended 187 mobile dispensary visits, 430 khelwadi, 620 Vaccination session, 440 delivery attended,967 pregnancy registration, child birth, 378 Gram Sabha/ Panchayat meeting ,450 Community meeting .

5.3 Human Health Camp:

In the year 2011-12, ACF conducted 9 camps in 6 villages, out of them 2 ANC/PNC camp. 5 General camps, One STD/STI camp, which include all type of medicine through above camp 219 patient directly benefited. All the camps were organized in the guidance of Govt. medical officers and get services of Govt. doctors and ANM during the health camp awareness session was also conducted.

5.4 Health Awareness Program:-

Providing free health care facilities is not a sustainable solution. Making people aware and change their behavior about the health and sanitation practices can solve the problem on the sustainable basis. To spread awareness among community 18 health awareness program was conducted in different villages covering safe drinking water issue, stree management and yoga , primary health care, sanitation issue, child vaccination and ANC/PNC care along with the social issue like child marriage, dowery, female foeticide etc.

VHS Committee is formed to increase the community participation in Community health sanitation issues. ACF has been Participating in VHSC meetings and also organizing training program for village level institution. This year 1 trainings were conducted and 120 soak pit were constructed in the village of the project area.

5.5.HIV/AIDS:

HIV/AIDS epidemic spread in concrete pocket of general population, ACF is working to spread awareness among staff, Truckers, cleaners as well as Community. We have a force of 50 peer

educators trained by master trainers out of them 25 Master trainer trained by ILO at our workplace HIV/AIDS programme. Through PE we are running sensitization programme and doing mainstreaming to HIV+. We have 25 female PE. Through our PE we are conducting, one to one contact, group meeting, sensitization programme through local culture team, community meeting, counseling session, capacity building of PE by outside agency, observe HIV/AIDS week, Red Ribban club in Senior Secondary School. During this year achievement one to one contact 3350 peoples in the project areas. 12 sensitization programs conducted in different villages. 250 group meeting were organized by these PE. Review meetings and training of these PE organized on the monthly basis. Free condom distributed through 16 outlets installed in different location in plant area as well as nearby sensitive points 10,500 free condoms were distributed. Two condom vending machine (CVM) installed in the plant area to promote the good quality condom among the staff and workers. Total 300 condoms sold through CVM.
Under the workplace program different awareness program conducted at transport Nagar, mines area, factory gate for truckers, laborers, Dhawa Owners etc. A sensitization session was conducted for women's staff club members.
Worlds HIV/AIDS week also observed by conducting different awareness and sensitization program/meet in factory campus as well as in nearby villages.

5.6 Identification of Positive People and linkage with Positive Network

During the year 7 HIV Positive were identified and linked with PNP+ for further facilities. Pali Marwar Network of Positive people (PNP+) involve in HIV/AIDS awareness program. Training, experience sharing also conducted through PNP+ at workplace as well as community program.

5.7 HIV/AIDS Awareness Booth:

During the HIV/AIDS week ACF run awareness booth on plant gate with, IEC material on HIV/AIDS, facilities for counseling services, pamphlet & CD, Video show was provided to awareness at workplace. The booth was run by Peer Educator. 700 workers, truckers were sanitized through booth.

5.8 Capacity building Training program to VHSC under NRHM:-

Being the district Nodal Agency for implementing the two days training program for Village Health and Sanitation committees in the district we have organized 133 training batches and trained 6180 participate out of them 671 PRI , 1505ANM, AWW, 771 ASHA has been trained .

6. EDUCATION SUPPORT

6.1 Village knowledge centre:

Village knowledge centre is being run at Govt. Sr. Secondary School, Balada and Govt. Secondary School, Rabriyawas to provide any demanded information and knowledge to the distinct section of the community at one place. Youth groups are also involved in the centre. Career counseling services by the experts are available on the centre.

6.2 Bal Sansad at School:-

Bal Sansad is being formed by the ACF with the motive to shape children as aware, responsible member of the community. Children of Bal Sansad are assigned a particular responsibility to perform. This year 21 Bal sansad were formed in 21 government schools of the project area .

6.3 Balwadi Centre:

To provide primary education facilities to children of Poor families, Dhani`s children where no govt. school facilities is available ACF running Balwadi Centre. Three Balwadi centre running in Kesherpura, Sasi Basti Balada, Talab Payla, 160 children covered by Balwadi during this year 42 children get mainstreaming of Education. For sustainability aspect we have made the collaboration with the ICDS department for supply of hot meal, THR to the beneficiaries of the community and we have proposed to ICDS for opening of mini AWC`s. Govt. has sanctioned the four Balwadi centre area into taken as Mini AWC`s on the recommendation of ACF.

6.4 Infrastructure support:- This year ACF provided 300 table and chairs and constructed toilet at Sr. Sec. School Balada. Apart from Infrastructure work ACF distributed 9th class books to 90 students at Balada and school uniforms to 25 students of Kesarpura.

6.5 Educational Exposure:

Every year ACF conducts educational exposure visits for school going children to provide them a chance to know about history of India. During the year two historical visit for Govt. school Ras, Keshrpura ,Sevariya and Patan were conducted to visit historical places of the state. It was three Days visit with the 120 girls and boys participants.

7. Mitigating poverty in western Rajasthan (MPOWER) :

Mitigation Poverty in western Rajasthan is a poverty reduction initiative with special emphasis on relatively poor and backwards Blocks within the drought prone, food insecure districts of western Rajasthan. The project is characterized by low population density, high ratio of population dependent upon agriculture and livestock, unreliable rainfall patterns, limited or no potential for irrigation fast depleting of ground water and frequent occurrences of drought. Under the programme the target group of all BPL households in the project area.

The main features leading Poor towards empowerment are their control over economy and knowledge about their rights. In the present scenario lack both, this is becoming the main barrier in their socio-economic upliftment.

ACF has been implementing MPOWER project in 63 villages of Block of district Pali collaboration with Panchayati Raj and Rural development department of Rajasthan and IFAD for the period of 56 months. presently we have formed 336 SHG`s, 22 VDC and cluster of SHG`s continually we are strengthening of Village Level Institutions through training and exposure on credit planning , financial literacy and providing the benefits from different government schemes and linkages with banks for income generation activities .

8. Rajasthan Minor Irrigation Improvement Project (MPOWER) :

Water Resources Department (WRD) has sanctioned Project for Capacity Building Initiatives of Water Users Associations (WUAs) under Rajasthan Minor Irrigation Improvement Project (RAJAMIIP) funded by JICA for 327 WUAs of 21 districts of Rajasthan. WRD has appointed Gramin Vikas Trust (GVT), Jaipur, as the Lead NGO. The project is being executed by GVT in partnership with 10 Consortia NGOs that includes the capacity building of WUAs through 9 areas specific NGOs (at least one for each Irrigation circle) and a separate sub-NGO for Pro-poor Component for SHG activities in six poorest WUAs.

Ambuja Cement Foundation has been entrusted with capacity building of water users' associations in Jodhpur and Pali Circle comprising of minor irrigation projects in Pali , Sirohi , Jalore and Barmer districts. Activities for strengthening forty water users associations for ultimate takeover of irrigation management by WUAs will be undertaken during the project implementation/phase.

9. Women Empowerment:

ACF Rabriyawas have been facilitating SHG as a tool for economic empowerment of women. 1173 women are connected through 106 SHG. They save Per month 10100. Their cumulative saving till November 2011 is 2319350. The total bank loan they have availed so far is 5343000. Out of which 2336338 is outstanding. Till now they have earned 26724 as interest. Their total corpus till November is 4989602.

ACF not only promotes SHG but organizes trainings to strengthen existing SHGs. These year 3 trainings have been organized in which 130 members have participated. The motive behind these training was to improve their record keeping skills and facilitation of leadership skills.

8th march is being celebrated as a international women's day. This year we celebrated with 90 women.

Annexure - VII

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of October - 2013

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	07.10.2013	63	52
2	Near Lime stone Crusher (Old)	07.10.2013	66	48
3	Old Weigh Bridge (Near Mines Office)	07.10.2013	64	52
4	SW End of CPP Boundary (Near Ballada Gate)	07.10.2013	68	54
5	Near Colony Gate	07.10.2013	54	45

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	04.10.2013	78	70
2.	Coal firing Blower	04.10.2013	76	62
3.	Compressor	04.10.2013	82	64
4.	Raw Mill – I	04.10.2013	80	68
5.	Raw Mill – II	04.10.2013	78	66
6.	Cooler Fan	04.10.2013	80	72
7.	Cement Mills	04.10.2013	82	66
8.	Packing Plant	04.10.2013	76	64

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
P.O.: Rabriyawas, Tehsil : Jaitaran, Distt. : Pali, Rajasthan – 306 709
Phone : 02939 – 288011-18, Mobile : 90010 90711 - 13 Fax : 02939 - 288030

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of November - 2013

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	09.11.2013	64	54
2	Near Lime stone Crusher (Old)	09.11.2013	68	47
3	Old Weigh Bridge (Near Mines Office)	09.11.2013	66	56
4	SW End of CPP Boundary (Near Ballada Gate)	09.11.2013	68	56
5	Near Colony Gate	09.11.2013	52	46

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	07.11.2013	76	72
2.	Coal firing Blower	07.11.2013	76	66
3.	Compressor	07.11.2013	84	72
4.	Raw Mill – I	07.11.2013	80	70
5.	Raw Mill – II	07.11.2013	82	72
6.	Cooler Fan	07.11.2013	80	70
7.	Cement Mills	07.11.2013	84	72
8.	Packing Plant	07.11.2013	78	68

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
P.O.: Rabriyawas, Tehsil : Jaitaran, Distt. : Pali, Rajasthan – 306 709
Phone : 02939 – 288011-18, Mobile : 90010 90711 - 13 Fax : 02939 - 288030

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of DECEMBER- 2013

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	10.12.2013	66	54
2	Near Lime stone Crusher (Old)	10.12.2013	68	50
3	Old Weigh Bridge (Near Mines Office)	10.12.2013	66	52
4	SW End of CPP Boundary (Near Ballada Gate)	10.12.2013	68	54
5	Near Colony Gate	10.12.2013	54	42

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	20.12.2013	78	68
2.	Coal firing Blower	20.12.2013	78	64
3.	Compressor	20.12.2013	82	66
4.	Raw Mill - I	20.12.2013	80	68
5.	Raw Mill - II	20.12.2013	78	66
6.	Cooler Fan	20.12.2013	79	74
7.	Cement Mills	20.12.2013	83	72
8.	Packing Plant	20.12.2013	75	66

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
P.O.: Rabriyawas, Tehsil : Jaitaran, Distt. : Pali, Rajasthan – 306 709
Phone : 02939 – 288011-18, Mobile : 90010 90711 - 13 Fax : 02939 - 288030

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of January- 2014

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	16.01.2014	62	52
2	Near Lime stone Crusher (Old)	16.01.2014	71	56
3	Old Weigh Bridge (Near Mines Office)	16.01.2014	72	62
4	SW End of CPP Boundary (Near Ballada Gate)	16.01.2014	64	52
5	Near Colony Gate	16.01.2014	50	44

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	16.01.2014	80	69
2.	Coal firing Blower	16.01.2014	77	65
3.	Compressor	16.01.2014	81	67
4.	Raw Mill - I	16.01.2014	79	66
5.	Raw Mill - II	16.01.2014	80	65
6.	Cooler Fan	16.01.2014	78	72
7.	Cement Mills	16.01.2014	80	70
8.	Packing Plant	16.01.2014	72	64

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
P.O.: Rabriyawas, Tehsil : Jaitaran, Distt. : Pali, Rajasthan – 306 709
Phone : 02939 – 288011-18, Mobile : 90010 90711 - 13 Fax : 02939 - 288030

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of February- 2014

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	18.02.2014	58	50
2	Near Lime stone Crusher (Old)	18.02.2014	74	58
3	Old Weigh Bridge (Near Mines Office)	18.02.2014	71	60
4	SW End of CPP Boundary (Near Ballada Gate)	18.02.2014	67	53
5	Near Colony Gate	18.02.2014	56	48

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	18.02.2014	79	72
2.	Coal firing Blower	18.02.2014	74	62
3.	Compressor	18.02.2014	82	69
4.	Raw Mill - I	18.02.2014	78	68
5.	Raw Mill - II	18.02.2014	78	64
6.	Cooler Fan	18.02.2014	80	74
7.	Cement Mills	18.02.2014	81	74
8.	Packing Plant	18.02.2014	68	63

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
P.O.: Rabriyawas, Tehsil : Jaitaran, Distt. : Pali, Rajasthan – 306 709
Phone : 02939 – 288011-18, Mobile : 90010 90711 - 13 Fax : 02939 - 288030

Ambuja Cement

Noise Level Monitoring Report of Cement Plant for the Month of March-2014

1. Ambient Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			Day	Night
1	At SWRP	28.03.2014	60	53
2	Near Lime stone Crusher (Old)	28.03.2014	75	60
3	Old Weigh Bridge (Near Mines Office)	28.03.2014	70	58
4	SW End of CPP Boundary (Near Ballada Gate)	28.03.2014	69	55
5	Near Colony Gate	28.03.2014	61	50

2. Plant Machinery Noise Level:

S. No.	Location	Date of Monitoring	Noise Level in dB (A)	
			At 5 Mtrs Dist.	At 15 Mtrs Dist.
1.	Coal Mills	28.03.2014	80	71
2.	Coal firing Blower	28.03.2014	76	62
3.	Compressor	28.03.2014	80	72
4.	Raw Mill - I	28.03.2014	79	66
5.	Raw Mill - II	28.03.2014	80	65
6.	Cooler Fan	28.03.2014	79	76
7.	Cement Mills	28.03.2014	78	75
8.	Packing Plant	28.03.2014	66	62

Lab. Incharge (Env.)

F03 (09-10)/01

AMBUJA CEMENTS LIMITED
UNIT – RABRIYAWAS
Works: PO Rabriyawas, Tehsil – Jaitaran, Dist. – Pali (Raj.) 306 709
Tel: 02939 288011-18, Fax: 02939 288030
CIN: L26942GJ1981PLC004717 Website: www.ambujacement.com
(Registered Office: PO – Ambujanagar, Taluka – Kodinar, Dist. – Gir Somnath (Guj.) 362 715)

Annexure- VIII

Ambuja

Cement

TO WHOM IT MAY CONCERN

THIS IS CERTIFY THAT THE PERIODIC HEALTH CHECK UP OF EMPLOYEES OF ACL, RABRIYAWAS WAS CARRIED OUT IN THE MONTH OF JAN 2014 AT AMBUJA HOSPITAL.

IN THIS EXERCISE A COMPREHENSIVE GENERAL AND SYSTEMIC EXAMINATION INCLUDING LABORATOTY INVESTIGATIONS WAS CARRIED OUT OF THE BELOW MENTIONED EMPLOYEES.

STAFF	**: 148**
Co'S WORKMAN	**: 106**
CONTRACT WORKERS	**: 185**

THE GENERAL AND OCCUPATIONAL HEALTH OF THE EXAMINED PERSONS WAS FOUND SATISFACTORY.

(DR. M.K. PATHAK)
CHIEF MEDICAL OFFICER
AMBUJA HOSPITAL
RABARIYAWAS (RAJ.)
Chief Medical Officer

Date : 4.6.14
Place : Rabriyawas

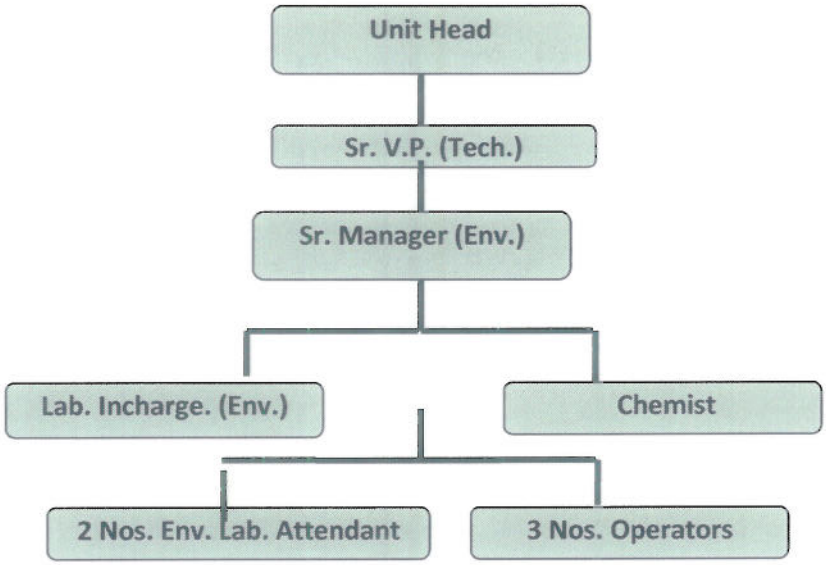
AMBUJA CEMENTS LTD.
Unit - Rabriyawas
P.O. Rabriyawas, Tehsil-Jaitaran, Distt. Pali, (Raj.) PIN - 306709
Phone.:02939-288011 to 18, 011-3717879 Mobile: 9828128011,12 Fax 02939-288030
(Regd. Off.: P.O.: Ambuja Nagar, Taluka: Kodinar, Junagarh, Gujarat)

Annexure - IX

Environmental Management Division (Environment Cell)

The Environmental Management Division (EMD) of Ambuja Cements Limited (ACL) has experts in the field of environmental management from different disciplines. This division is also supported by sufficient qualified staff for maintenance of pollution control equipment from civil, Mechanical, Automation & Control and Electrical Depts. Company has full-fledged Horticulture department with staff qualified on forestry and horticulture.

Organization Structure for Environment Management Division



Environmental Laboratory:

Full fledged Environmental Laboratory with modern sophisticated equipments for collection and analysis of Air, Water & Waste water samples under the supervision of the Environmental Management Division. A list of laboratory equipments is as follows:

S. No.	Name of Equipment	Make	Model No.	Quantity
1	CAAQM Station along with Weather Monitoring Kit	Environnment – SA	Sonimix 3022 EN Series	01
2	CEMS	Dust Monitor : Sick Maihak Gas Analyzer: Chemtrol	OMD41, MCS100E HW	01
3	RDS (Respirable dust Sampler)	Envirotech Instruments Pvt. Ltd.	APM 460 & DX APM –460 BL	06
4	Fine Particulate Sampler (Combo PM10 & PM2.5 Sampler)	Eco Tech Instruments Pvt Ltd	Ecotech AAS 271	02

S. No.	Name of Equipment	Make	Model No.	Quantity
5	HVS (High Volume Sampler)	Envirotech Instruments Pvt. Ltd.	APM –415	01
6	Stack Monitoring Kit	Envirotech Instruments Pvt. Ltd.	APM –620	02
7	Stack Velocity Monitor	Envirotech Instruments Pvt. Ltd.	APM –602	01
8	Handy Sampler	Envirotech Instruments P Ltd	APM –821	01
9	Personal Sampler	Envirotech Instruments P Ltd	APM –800	02
10	Sound Level meter (SLM 100)	EPIL	30-DTI-2008	01
11	Flue Gas Analyzer	Kane international	KM – 9106	01
12	Diesel Smoke meter	Neptune Equipment Pvt. Ltd	Opax 2000 II/DX 200 P	01
13	Infrared Exhaust Gas Analyzer	Neptune Equipment Pvt. Ltd	TD 240/EGA 200	01
14	Weather Monitoring Instruments i. Anemometer ii. Wind Van iii. Air Temperature iv. Relative Humidity v. Rain gauge vi. Data logger	Dyanalab	 DWA 8600 DWD 8601 DWT 8102 DTH 8103 RRR 100P DL 1002	 01 01 01 01 01 01
15	On line Opacity Meter	Sick	OMD/41 – 02	07

S. No.	Name of Equipment	Make	Model No.	Quantity
16	Spectrophotometer	Spectronic Instruments	Spectronic 20 Genesys	01
17	Pressure manometer	Comark	C – 9553	01
18	Refrigerator 165 lit.	Godrej	Classic Del.	01
19	Hot Air Oven	Ambassador	BPI 9&10	01
20	BOD Incubator	Ambassador	BPI 34	01
21	COD Reflex Apparatus	Ambassador		01
22	Muffle Furnace	Ambassador		01
23	Water Bath	Ambassador	BPI 22	01
24	Balance 0.1mg	Precisa	Series XB	01
25	pH Meter	Systronics	335	01
26	TDS –Conductivity Meter	Systronics	308	01
27	Hot Plates	Ambassador		06
28	Separating Funnel	Borosil		02
29	CO Sampler (Ambient)	Pollution Protection System	GaZguard TX	01
30	Monitoring Van	Mahindra & Mahindra	Bolero LX	01