

EXNORA INTERNATIONAL: MOVEMENT FOR SAFE AND CLEAN ENVIRONMENT

M. B. Nirmal

INTRODUCTION

ExNoRa International is a widespread environment movement founded by the renowned social activist, M. B. Nirmal in 1989. In September 1988 he wrote in popular magazines about the positive experiences he had during his visits abroad, particularly as the Chief Manager of the Indian Overseas Bank branch in Hon Kong. His writings inspired his close friends and the readers who thought of implementing these ideas in India. They were concerned about the accumulating municipal garbage in the streets without being cleared and came to the conclusion that the solution rested with the involvement and participation of those who generated the garbage and not entirely with those who are in charge of collecting and dumping it (e.g. local body). This realisation gave rise to the formation of ExNoRa as a non-government organisation (NGO). ExNoRa focuses on mobilising and empowering communities to participate in preserving nature and preventing environmental degradation, thereby improving the quality of life of the common human beings.

The word ExNoRa is an acronym of three words, **Excellent**, **Novel** and **Radical**. In one's thoughts, words and action, one has to ensure these qualities. One's ideas have to be extraordinary, new and transformative. The goal of ExNoRa, therefore, is to formulate and practise excellent, novel and radical ideas in solving problems of society with the involvement of the same people who are the sources or originators of the problems. True to its name ExNoRa attracted people, who all came with ideas which are really ExNoRa in nature.

ExNoRa Belief System

The programmes and activities of ExNoRa in pursuit of its goal are based on certain beliefs, viz. sharing of knowledge, joint action and exchange of ideas.

1. Knowledge Sharing

What you know, I do not know, and

What I know, you do not know.

Together we know a lot.

When individuals join ExNoRa, an organisation for ideas, together they will know so much that they can transform their town/village.

2. Joint Action

What you can do, I cannot do.

What I can do, you cannot do.

Together we can do a lot.

When individuals join ExNoRa, together they can do good and undo injustice.

3. Exchange of Ideas

I have one Rupee and you have one Rupee. We exchange them and you have one Rupee and I have one Rupee.

I have an idea and you have an idea. We exchange them and you have two ideas and I have two ideas.

When individuals join ExNoRa with each one contributing several ideas, the members will become idea billionaires and are bound to transform the world. The rest will be history.

India as Resourceful Country

In accordance with the above belief system ExNoRa accepts that every nation has its own vital potential. For example let us take India, where ExNoRa was born. ExNoRa considers India as a resourceful country. No doubt India has an entry, one billion stomachs to be fed on the liability side of the balance sheet. But if one turns one's attention towards the asset side of the same balance sheet, one will be amazed to see two entries: (1) one

billion brains and (2) one billion pairs of hands. Yes, India is a resourceful country with positive tangible human net worth, a vast reservoir and ocean of human resource. The people only need to be guided to ‘think positively and work constructively.’ Can all of us do it?

It is the great lesson that the father of the nation taught us. The colonial rulers had weapons, arms, machines and gunpowder. But what Gandhiji had with him was the people resource. The occupiers’ ammunitions were no match to the people power which Gandhiji could gather in such huge number. ExNoRa identified garbage and sewage as the worst common enemies of people and successfully could mobilise them to wage war against the danger within, truly following the footsteps of Mahatmaji. This principle applies to any country.

ExNoRa has a very unique ‘Community HRD’ programme to fulfil its mission. People through ExNoRa’s social mobilisation programmes are motivated to participate in all programmes of common issues and concerns, and thus they are converted as social capital. Motivated people can do miracles. Undoubtedly ‘motivation’ is the greatest ‘psychological tool’ and the best ‘management technique’ which ExNoRa uses all the time in all the places with all the people.

ExNoRa Chapters

ExNoRa International has branches/chapters called the ‘ExNoRa Innovators Clubs’ functioning in various towns and villages. Its sub-chapters or replicable community based organisations, called ‘Civic ExNoRas’ (CBOs), are located in different streets or localities. The service at the grassroots level is carried out by miniature home based organisations, called the ‘Home ExNoRas’ (HBOs) and located at human dwelling units (houses/flats/huts). Even for individuals who have no time to take part in environment protection activities, there is the ‘Mind ExNoRa,’ which is basically an activity for, of and by *mind*.

There are no committee members in these three tier organisational chapters of ExNoRa. Instead, there are directors, each in-charge of a role/

portfolio/activity. After all, the talents needed for realising the common goals are available in a street or locality. Let us remember that, however talented and knowledgeable one is, one must be living in a house, in a street/locality. We have so many talented men and women, for example, in the form of retired persons and housewives. ExNoRa does a wonderful human resource harvest of enrolling and involving them in its activities. That is not all. The office bearers or directors are trained. ExNoRa also does capacity building of the members of residents’ welfare associations. ExNoRa’s biggest success is its ability in human resource mobilisation (Civic ExNoRa for streets, Home ExNoRa for residents in homes, Senior Citizens ExNoRa for retired persons, Women ExNoRa, Student ExNoRa, Youth ExNoRa etc.). Students come to ExNoRa as interns and learn a lot. ExNoRa offers a Diploma too in Local Environment Management (EDLEM).

Activities of ExNoRa

ExNoRa International was founded in Chennai, India as a non-profit, non-political, secular, non-government, environment service organisation with the aim of realising a cleaner, greener and more environment friendly world. Within the first 10 years of its existence it has grown into a widespread movement covering many parts of India. Today after twenty years, ExNoRa International is a force to reckon with and is a national movement.

ExNoRa originated with the major objective of making the environment safe and clean. Till the turn of the century, the issue of environment protection and management was much the preserve of specialised environment groups, scientists and administrators, though very often the cause of environment degradation is the whole humanity and its impact is on every one. ExNoRa’s fundamental philosophy is that no environment protection or management is meaningful unless it becomes the conscious choice of all or substantially all the population. The major activities undertaken by ExNoRa under this philosophy have been to deal with environmental issue of waste management and global warming.

WASTE MANAGEMENT

ExNoRa, since the start in 1989, has seen that mismanagement of waste was the most important cause of environment degradation, and that

this affected the poor more than the rich. The inability of the local bodies to manage the waste was due to the sheer volume that was generated and lack of resources to manage it. This problem needed a solution that involved the participation of people who after all are generating the waste. ExNoRa's strategy was to motivate people and involve them in the sanitation of their own locality. This was done by bringing them together through neighbourhood communities or civic ExNoRas. Over the past decade and a half, ExNoRa has been able to motivate and form thousands of community based organisations (Civic ExNoRas) across India, whose members took "civic pride" in their locality, managed their waste in an environment friendly way and in part were able to participate in the governance of their locality. The interesting, though unexpected, gain of this development was that several residents' welfare associations got their organisations affiliated with ExNoRa International and their members received full training in local environment management and in tackling civic issues.

The focus of ExNoRa has been on waste to wealth programmes. Today waste is a misplaced resource and an unrecognised wealth. In India 75 per cent of waste is organic in nature. About 75 per cent of the people in India are still employed in the farm sector. If more organic waste is converted into organic manure, it would be more helpful to the farmers. People become healthy by eating organically grown food. Organic farming does not harm the farm workers, as there are absolutely no health hazards. When we can turn it into cash, why burn trash and make it ash!

ExNoRa firmly believes that it is quite possible to develop different kinds of replicable models to suit different places and situations. The various prototypes developed by ExNoRa are indeed replicated everywhere today. The vision has been to promote sustainable human settlements, through the promotion of waste management as an income generating opportunity. Practices today by Civic ExNoRas include solid waste management, liquid waste management, rain water harvesting and recycling. Participation of Civic ExNoRas has cut across all income groups. This was possible because the financial contribution of members for the expenses has been kept minimal. The extra income generated through sale of compost and recyclables can even cover the maintenance costs of the Civic ExNoRas.

Awareness programmes, such as participatory card exercises, film shows, street plays and door-to-door campaigns, are the first step towards implementing the programme of solid waste management. Source segregation of waste as inorganic and organic is the initial activity in the implementation of waste management. Supply of all equipments such as the red and green waste bins for source segregation, tricycle for the street beautifiers, gloves and uniforms, construction of the compost pit and zero waste management shed are provided by ExNoRa. Training and guidance of the street beautifiers and conservancy workers is another activity in the operation of waste management programme. Other related activities are formation of operation-and- maintenance committees and obtaining the approval from local authorities and representatives.

Three Tier System of Waste Management

The concept of Civic ExNoRa was introduced first in Adyar area of Chennai in October 1988. The residents who generated garbage got themselves together to collectively solve the problem of solid waste accumulation, by removing and relocating it in an identified dumping place. A street beautifier was employed and given a tri-cycle to collect waste from door-to-door, all of which were funded by small subscriptions from the members in the community. The very activity has evolved itself to waste becoming wealth within the place where it is generated like home, office, industry, educational institution, place of worship, park, etc. through its **Source Solid Waste Management (SoSoWaM)**.

The second level of the garbage disposal activity was the management of waste from streets/residential colonies/municipal wards. Waste management at this level is named by ExNoRa as **Decentralised Solid Waste Management (DeSoWaM)**.

The last level of waste management is the **Centralised Solid Waste Management (CeSoWaM)** which is the third preferred option. This should be done only in respect of waste which cannot be converted into wealth at source or municipal ward level. CeSoWaM is ideal for small villages. All the three levels of waste management come under a broader concept called **Solid Waste Management (SoWaM)**.

There are more than one lakh (100000) Civic ExNoRas in the various districts of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala and a few northern states in India, and they cover more than two lakh streets and settlements.

The waste management in a locality is under the purview of the local body. ExNoRa has been instrumental in the enactment of the Municipal Solid Waste (Management and Handling) Rules 2000 through the public interest litigation filed by the organisation in the Supreme Court. This has provided guidelines for Municipal Authorities to be followed in waste management. ExNoRa has helped the local authorities through consultation as well as partnership to manage 'Zero Waste Centres'.

Liquid Waste Management

ExNoRa has similarly conceptualised waste water management. ExNoRa does not use the word 'waste water,' but calls it as "used water" which means that it can be reused. Just like SoWaM, ExNoRa has LiWaM (meaning **Liquid Waste Management**). LiWaM too has three layers in its operation similar to solid waste management, viz. SoLiWaM (**S**ource **L**iquid **W**aste **M**anagement), DeLiWaM (**D**ecentralised **L**iquid **W**aste **M**anagement and CeLiWaM (**C**entralised **L**iquid **W**aste **M**anagement).

ExNoRa follows the three layer/tier system (source, decentralised and centralised) in other civic and environment programmes such as rain water harvesting, and even in its social mobilisation and organisational mechanism (e.g. ExNoRa Innovators Club for the town/village, Civic ExNoRa for street/residential colony, and Home ExNoRa for individual houses/flats).

ExNoRa through its different tiers goes to the street and initiates the local people into Civic ExNoRa. Civic ExNoRa initiates Home ExNoRa in each and every home and Home ExNoRa involves each and every family member. As a result, the whole area from home to the street becomes clean, green and beautiful. Civic ExNoRa has certainly made a difference to the quality of human settlements and the living environment of the people within its coverage. All the places covered by ExNoRa are practising its activities of composting, solid waste management, liquid waste management, home

farming, tree planting, energy conservation, waste minimisation, rain water harvesting and tapping renewable sources of energy.

Since the start of ExNoRa, these practices have been implemented and replicated in many places. The replication and sustainability of the practices became possible because:

- Local communities were motivated first, their involvement was enlisted and they were encouraged to high levels of self-involvement.
- Monetary contribution from communities was maintained at the minimal level. In contrast, it was shown that a high level of waste management was indeed resource management, and model households have generated income at the household level through recycling and reusing, and also home farming.
- The concept of zero waste management has been widely spread and local communities have been enabled to introduce it easily.

Reliance on Psychology rather than Technology

There has been a debate on whether the use of Psychology or the application of Technology is important in the area of solid waste management. In the case of ordinary people, there is less scope for their adoption of technology in the practice of environmental related issues. In fact, in executing such an important exercise like composting, the technology is damn simple. Composting is done by nature which is always waiting to help us and is totally *free*.

The most important thing for the local administration, NGO leaders and guides in solid waste management is to be well versed in common and simple psychology. It is after all a question of handling people who handle waste. It is important to create awareness among the people, help them understand the issues and motivate them to participate in the activities. ExNoRa uses the phrase of "simple psychology," by the practice of which the organisation achieved incredible success.

Solid waste managers in fact handle people: (i) who handle garbage (workers of local bodies, contractors, voluntary organisations, residents' welfare associations, and self-help groups), (ii) who generate waste (people, institutions and industries), and (iii) who manage garbage (local body officials and elected representatives), and their own colleagues or team mates. Therefore, it is more a question of handling people than handling garbage. Motivating communication is an important factor in the whole process of waste management.

Source Segregation: 20/86400

An important practice that people have to accept in waste management is source segregation, which in fact is quite simple and easy. ExNoRa has conceptualised the formula of "20/86400" for facilitating source segregation. It is the formula of "T4" (Twenty seconds To Total Transformation). Yes, on a day which has in all 86400 seconds, one has to give only 20 seconds to do source segregation (1 by 4320). That will result in a cleaner world and a world of wealth in the place of a world of waste. People are impressed that waste management is as simple as that. ExNoRa went to people and convinced them that it is not an activity which will rob their time, but it is just a matter of developing a simple habit called source segregation. After all, a habit acquired will stay permanently.

For zero waste management, the initial segregation is into compostable and recyclable waste. The compostable consists of organic, wet and natural (or biodegradable) waste. The recyclable consists of inorganic, dry and human-made waste. In the process of segregation initiated by ExNoRa, the compostable waste is transferred to the green bin and recyclable to the red bin.

ExNoRa convinces people that "waste is not waste until it is wasted." ExNoRa impresses upon people that handling waste is not waste management but resource management. We should not just stop telling people 'what' they should do, but also tell them 'why' they should do. The question 'why' is more important than 'what' and answer to the question of why satisfies individual egos.

The benefits of managing waste in this manner are multiple: better hygiene and good health to the people, sense of pride and unity to the community, environment protection to the nature, conservation of resources for the future generations, job opportunities for the unemployed, and facility for the local body for making money from waste instead of wasting money on waste.

Home Beautifier Programme

Protection of our planet is in the hands of each and every one of us. All people should understand and practise the habit of keeping our surroundings clean especially our homes and the space near it. In this fast track life of ours many people do not have time to even notice if their surroundings are clean. As an answer to such a situation, ExNoRa has introduced a new programme called 'home beautifier.' The home beautifier performs the following activities: composting organic waste, collection and disposal of recyclables, treatment of sewage water into garden water, home farming (which includes terrace gardening/sky farming), optionally home front gardening, and additionally/optionally home cleaning through vacuum cleaner.

A youth or woman, designated as home beautifier, is entrusted with not more than 20 homes. He/she will work for half an hour on alternate days in one home. He/she will be paid a minimum of Rs.100 per month which may go up to any amount depending upon the volume of work, size of the area and time spent. The home beautifier will take away the non-biodegradable wastes (like paper, plastic, metal, glass, etc. free of cost), which will be sold to scrap shop.

Borda Dewats Project

The Boda Dewats project, implemented in East Devadanam, Tamil Nadu has been ExNoRa's first milestone achievement of its kind in the field of decentralised system of waste water treatment to improve the living environment and promote sustainable human settlement for marginalized communities. The aim of the project was to support communities in planning,

designing and constructing effective, reliable, cost efficient and custom made waste water treatment system. The project has been a successful engineering achievement in terms of sustainability and environment friendly techniques.

The toilet complex constructed under the project has the capacity to accommodate 30 users at a time. Every user of the toilet pays a nominal fee of 50 paise per use. The toilet is attached to a bio-gas settler, and the bio-gas is used for lighting the bio-lamps in the toilet complex and for cooking as well. Use of bio-gas generated from human waste for cooking is commonly in conflict with the cultural belief in India. There is a stigma in using human waste and its by-products, making it socially unacceptable. However, with active education and awareness campaigns, much to the credit of the project, slowly a change has been made in the attitude of the community towards more modern views. On 11 October 2005, the Saraswathi Pooja day, the *pooja prasadam* was cooked using bio-gas and all ate it with reverence and enthusiasm.

Today the toilet complex has a beautiful garden and does not have the normal look and smell of a public toilet. The waste water of about 5000 litres per day is treated and used for cultivation of vegetables for the community. The 1548 people of 378 families that reside in East Devadanam now lead their lives under much better hygienic conditions and have a higher quality of life with the facility of the community based sanitation centre which provides environment protection and solution to the sanitary problems.

Green Cross Vellore

ExNoRa Green Cross Vellore (Tamil Nadu) was started in 1995 as an affiliate of ExNoRa International. The vision of the Green Cross ExNoRa has been to “bring about socio-economic change through employment generation based on environmental conservation by enlisting people’s participation.” ExNoRa Green Cross began with a project to restore the Vellore hills and ran into several interconnected issues. To restore the topsoil, a project to compost organic waste was started. To generate cattle dung for composting, a project to protect the cattle wealth was initiated. To stop people from depending on the hills for firewood, renewable energy units and several alternative income generation activities were introduced. As much

as possible, the projects employed eco-friendly and labour-intensive processes, used renewable sources of energy, local and biodegradable materials, and avoided the use of machinery.

The strength of the Vellore team is their focus on demonstrating simple and replicable solutions to long-standing environmental problems of the community. An important achievement of ExNoRa in Vellore has been ending the myth that financial subscription from low income settlements, especially slums cannot be raised for any environment project. The Vellore ExNoRa team has shown that even the slum dwelling people are willing to contribute towards an environment project as long as sufficient and proper motivation is given to them.

Green Pammal Project

Green Pammal project was started by ExNoRa in 1994 with the initial objective of managing garbage in the Municipality of Pammal in Tamil Nadu. The project has demonstrated that in areas in transition from rural to urban, where the government service delivery system is weak, civil society organisations have an important role and enormous potential to improve local environment which will have dramatic ripple effect in bringing development. In partnership with the people, the Green Pammal solved the problem of waste through source segregation of solid waste, vermi composting of organic waste, and sale of recyclables.

Before the start of the project initiative Pammal Municipality and its 21 wards were a mess of garbage being dumped and burnt in open plots. The unhygienic atmosphere and almost negligible waste management by the municipality saw the pollution and destruction of the Pammal lake. The most affected due to these unhealthy practices were the slum dwellers who had their settlements near the dumping sites. There was also widespread apathy among residents and diseases existed due to the unhygienic conditions, especially among women and children.

The project has generated jobs for many unemployed youth as street beautifiers and encouraged micro enterprises. Workers were given training on how to recycle waste, and instructions on value added sales have helped

many workers ensure self-employment activities for themselves. Pammal Green ExNoRa has now standardised the collection and composting methods to suit the local conditions. The zero waste centre is functioning well. Garbage collection is done through street beautifiers with waste collection cycle carts. The compost produced is sold as manure. There is no more dumping or burning of the garbage in any of the 21 wards of the Pammal Municipality.

The Pammal project with help from its partners mobilised all the resources required for the project. The project raised more than Rs.1200000 from community, businesses and industries in Pammal for the restoration of the lake. The support of the local council and government officials was sought for the project. This was the first instance in Tamil Nadu that an activity of this magnitude was carried out with community participation without receiving any grant from the government.

The project with its efforts has succeeded in achieving many results. There has been actual improvement in the living environment for people, especially women and children. The cleaner atmosphere and litter free streets are the first noticeable achievement. There is today better coordination and integration between the various partners, organisations and institutions. Today women's groups, local government and youth groups have joined hands to work together. There has been a great change in people's attitude since the project. In particular, those who opposed the women's initiative and the efforts taken, later appreciated their efforts and joined hands with them when they saw the results themselves. In short the impact of the Pammal Green project of ExNoRa has been an admirable effort towards sustainable human settlement and living environment. ExNoRa Green Pammal has been a unique joint venture of private, public and government participation to improve the living environment and to promote more environment friendly sustainable human settlements.

Sukuki ExNoRa Project

An ExNoRa project of waste management was implemented at Cuddapah in the state of Andhra Pradesh. The project covered Cuddapah Municipality and its 21 wards and the beneficiaries were around 33,095 families and commercial establishments. It has been a good example of

how resource recovery can be achieved through composting of organic waste and recycling of inorganic waste. There has been employment generation for about 120 workers who are now involved as private workers in the composting project.

The methodology used for waste management has been to segregate garbage (into organic and inorganic) from the residents, shops and other generators of waste and to transport it to the "Material Recovery Facility" (garbage station) by the street beautifiers. Inorganic waste is further segregated and packed separately for sales at the "Recyclable Sorting and Storage Facility." Organic waste is transported to the Cuddapah Solid Waste Conversion Hi-tech Welfare Environment Pvt. Ltd. (composting facility) by the Municipal Corporation for composting. The introduction of zero waste management and composting of organic waste has made significant contributions towards poverty reduction and increased access of this basic service to the poor, since over 35 per cent of the project area is inhabited by low-income groups and slum dwellers.

The project has been a partnership between Sukuki ExNoRa and the district administration of Cuddapah. Sukuki ExNoRa has been providing the technical know how for the project implementation and monitoring. The district administration has been the coordinating agency. The infrastructure of the "Material Recovery Facility" and funding are supplied by the Cuddapah Municipal Corporation. Self help group members and youth were mobilised as workers and employment was provided to them as well. Sustainability of the project is ensured by the continued participation of the women's self help groups/resident welfare associations. User charges are collected from every family at the rate of Rs.10 from slum/low income, Rs.15 from middle income and Rs.20 from high income groups. Additional funds are also generated through sale of compost and recyclables.

The Cuddapah experience has been one of participatory and inclusive system that has involved the local government, community, private enterprises and the stakeholders at every level. This project has created a mechanism at Cuddapah to work for the zero waste management in a suitable manner and has also trained the sanitary workers and officials of the Cuddapah Municipality as well as the formal/informal private sectors. Besides, it has

also helped in creating a facilitating atmosphere for developing solid waste management and micro enterprises with access to funds and project expertise.

GLOBAL WARMING

Today the most serious threat to our planet is global warming. Environmentalists and scientists world over are concerned about the increase of carbon content in the atmosphere due to the excessive use of fossil fuels. The situation has become serious and various studies by world bodies and reputed environmental institutions have only confirmed the catastrophe waiting at our doorsteps. According to the famous environmentalist, Al Gore “Within 10 years the planet will become uninhabitable due to global warming.” Other environmental problems faced by the earth planet today are ozone depletion (which exposes the living organisms on earth to the harmful ultra violet rays of the sun), deforestation, desertification, increasing air, water and soil pollution, depletion of natural resources, dwindling of bio-diversity and wildlife, and increase in ecological imbalance.

ExNoRa has its own programmes and activities in the context of the threats of environmental problems. They are basically focussed on making the people aware of the various environmental problems and motivating them to do their bit in handling them. While the international slogan for environment protection is “think globally and act locally,” ExNoRa’s slogan is “do domestically too.”

Awareness Campaign

In 2008, ExNoRa carried out a mass campaign under the name “88888 Lights Out.” It consisted in switching off lights for 8 minutes at 8 p.m. on the 8th day of the 8th month of the 8th year of the millennium. It was a very big success and our effort paid 100 per cent dividend. Print and visual media showered their praise for the success of 88888 Lights Out. Now ExNoRa has just launched the “99999 Lights Out” campaign. People are requested to switch off light for just 9 minutes at 9 p.m. on the 9th day of the 9th month of the 9th year of this millennium (that is, 9 minutes at 9 p.m. on 09/09/09). It is done not just from the view point of saving power during the “lights out”

duration of 9 minutes. But it is essentially done to make people curious to know why they should switch off light which gives the opportunity to explain to them all about global warming. ExNoRa requests all the readers to join in the 99999 lights out campaign. See www.99999.co.in for details.

CONCLUSION

ExNoRa has its own principles of action, which it wants to promote among the people. Become an incurable optimist with undying, unquenchable, unshakable and unstoppable optimism. Keep communicating the message non-stop with strong will and tireless efforts. Remember that one’s work cannot go without results. Here is a food for thought and seed for mind: “You can sow a seed and go to sleep. The seed does not sleep.” Develop “never give up” and “never say die” attitudes in life.

ExNoRa invites all to join in as many of its initiatives as possible. You can join as a member of ExNoRa International Head Quarters Club. You can get designated as an ExNoRa Environmentalist. You can become an ExNoRa Representative for your locality, residential complex, office, educational institution or place of worship. The earth planet is running out of time. Let us join together immediately and work collectively in order to protect our only home, the planet. See the website: www.exnora.org.