



P-519

## The 5th Dimension!

*Tridiv Hazarika, Oil India Ltd.*

### Introduction

It's a well known fact that technological advancements in the last decade has pushed Geophysicists to unravel the secrets of the earth's bosom from not only three dimensions but also the fourth dimension of time. Cutting edge technological tools, high end computer software and virtual reality set-ups have provided geoscientists with the prowess and knowhow to probe the complex underbelly of the blue planet into hitherto inaccessible depths.

As a lay person, out of sync with the intricate sub surface world of the geoscientists, I can on the basis of fourteen years of close proximity to the world of hydrocarbon raise an issue, which, I am sure was never an agenda in the minds of the pioneering as well present geoscientists. I am referring to the new surface level challenges that confront geoscientists as well as other professionals, especially those who belong to the much maligned extractive industry. I have named it as the fifth dimension – the space that belongs to the most important elements of the stakeholders – the community.

The five decades of the OIL's journey has been punctuated by quite a few exclamatory marks of conflict between the Company and her publics. Oilindians have always worked in testing geo-political environment in areas known to be conflict zones. And interestingly, while it is OIL as a Corporate entity which had to cope with many a difficult situations, on quite a few occasions, it were the geophysicists of the Company who had to face the ire of the local populace. Due to environmental concerns of civil society, OIL could not carry out the much awaited seismic survey of the Brahmaputra river bed in Assam, which according to geoscientists could provide vital data for discovering a rich reservoir of hydrocarbon.

Even a Company like TATA with such rich heritage and global image as an exemplary employer and trend setters in the area of corporate social initiatives also had to

face the wrath of this new emerging and vociferous new dimension, the very closely guarded domain of the proverbially common man, and more specifically the residents of operational areas, the immediate neighbours of all corporate entities – human settlements.

### The Humane angle

In the E&P industry, mutual trusts between the corporate and the community is a precondition for uninterrupted operations. Community relationship has always been a key aspect for extractive industries like oil & gas. Oil & Gas are always explored and produced in the remote rural landscapes ad country side. In the Indian context, barring the desert region in Rajasthan and Gujarat and the high seas, both private and public sector oil companies are operating in interior areas with high density of population. The close proximity of the industry to human settlements and arable lands creates the potential of conflict for a variety of reasons, pollution, compensation packages for sale of land, demands for developmental interventions, employment being some of the major issues.

A careful analysis of the hydrocarbon exploration activity workflow reveals that that the geophysicists are among the first representatives of an Oil and Gas Industry to come into direct and constant contact with the local populace where they would carry out seismic surveys. And invariably this becomes the first contact of the hydrocarbon industry and the local populace. This is always a very delicate and epic encounter because it creates the first impression on the mind of the key stakeholders which in the long run plays a critical role in developing a mutually respectable relationship minimising any possibility of apprehensions, suspicions and trust deficit.

In the context of OIL, over fifty years of operations reveal that it is not the Public Relations personnel but his colleague in the Geo Science Group who becomes the first contact between OIL and the local populace, especially of new virgin areas, where OIL sets foot. This is a very crucial



## The 5th Dimension!



"HYDERABAD 2012"

meeting of the Oilindian and the community. Suddenly a relatively quiet hamlet wakes up to a paraphernalia of machineries, vehicles, modern gizmos and of course strangers armed with stranger looking tools. It is almost like an encounter with an alien species. There is first a cultural shock, followed by understandable apprehensions about the possible impact of the presence of the strangers on their lives and livelihood.

### **Geophysicists as brand ambassadors**

This is perhaps the most delicate moment when the geophysicists have to become true brand ambassadors of the industry and the Company they represent. First impressions indeed are a lasting impression. Geophysicists must therefore have good people skills, not only to manage the huge manpower under their command, while doing the seismic surveys but also deal with the local populace.

This also implies that the geophysicist must have reasonable knowledge about the culture and psyche of the local populace and sensitive to their customs, traditions and beliefs. They must also have adequate information about the various corporate social responsibility initiatives of the organisation they represent. In areas prone to frequent law and order problems, one has to also be alert to the ground realities and be in sync with current realities of the area of operations. To illustrate this point, I would like to mention about OIL's operations in a geo-politically volatile state like Assam, especially the oil field areas of OIL in upper Assam, which has been witnessing militancy and related complications for the last three decades. Interestingly, these are the areas which accounts for most of OIL's crude oil production and despite the odd incident, the Company has been able to operate in these areas without any major incident.

It must be mentioned here that a huge credit goes to the geophysicists of OIL and their extended team of support staff for their well calculated response to the ground realities. The leadership of the geosciences group in OIL have clearly understood the ground realities and have succeeded in adopting a well coordinated response, wherein each and every personnel of the group are groomed up in a manner that they develop people skills at a very

early stage of their career. The young geoscientists are made to understand right at their initial days in OIL about the need to pick up the local language, appreciate the cultural and ethnic diversity and also aware of the basic do's and don'ts, which go a long way in helping them confront with typical field problems.

This is the need of the hour across the country and elsewhere. Today, OIL's geoscientists have to work not only in virgin areas in different parts of India but also venture into foreign land in Africa and Middle East. Any in many ways, these regions are also beset with a fair share of geo-political turmoil. Once again, the geoscientists have to arm themselves with skill sets outside their professional domain. It is not an easy task; there are no short cuts either. One must acquire a rich appetite for developing a spontaneous urge to develop a long lasting rapport with the local populace. It is not merely the sound waves from the earth bosom that the geo- phones will record; the geoscientists must also have an ear and a heart to record the aspirations and expectations of the people. Those who master this skill area will invariably will have an edge over those who ignore the same.

One also has to be aware of how the media functions. One has to be very careful while handling the curious reporter, especially those who do not have adequate exposure to the world of geoscientists. While most companies would have a specific media policy, whereby there will be specified company spokesperson or a PR team who would respond to the media, it is but natural that the field reporter would always prefer to record the views of the geophysicists at the operational site while filing a news item on exploration. Therefore, besides not speaking out of turn as per the company policy, a geoscientist must also have to understand how media behaves so that one can, if the need arise, especially during moments of crisis, handle the media effectively.

In the global oil & gas industry, there are divergent views about the concept of peak oil. While it is believed that most of the prolific reservoirs of oil and gas have been discovered, experts are still confident of discovering huge reservoirs of hydrocarbon onshore or in the high seas. While opinions vary there is a visible convergence on the



## The 5th Dimension!



"HYDERABAD 2012"

fact that most of the newer and virgin areas where geoscientists are venturing out have been defined to be geologically and logistically challenging. In the Indian context, where most of the prolific areas within the 23 sedimentary basins have already been discovered, it is a known that the new areas are in rather challenging terrain, from marshy lands in the east coast, to mountainous terrain in the North east.

But what is perhaps most challenging and somehow not being discussed with the same emphasis is the growing conflict and resentment from local populace. Land, which the most key resources in the exploration business continue to a scarce commodity and land acquisition, has become a major hurdle coupled with the challenge of meeting stringent environment standards and laws.

This is where I would like to introduce the concept of 5th Dimension and 4P, brining in a new thinking of integrating environ and people management as a critical and integral aspect of hydrocarbon exploration. While geoscientists grapple with their world of 2D, 3D and 4D seismic surveys and 1P, 2P and 3P projections, they have in recent years also to deal with the fifth Dimensions or 4P, where the dimension and P denote people and people's concern on issues of land acquisition, possible industrial hazards, pollution and "what's in it for me" outlook. Understandably this "P" in context is indeed laden with extreme probabilities and a dimension with extreme complexities.

Today, Social Responsibility and environment management are no longer standard corporate jargons without any teeth. These are serious issues and oil explorers have realised that surface level human dynamics and environment related issues are becoming more complex than deciphering the sub surface formations.

In the Indian context, E&P companies operating in areas with thick population have to negotiate growing resistance from the local residents who are today more aware of their rights and privileges and also well informed about the potential hazards of such an industry. Therefore unless these concerns are not properly addressed and the people at large do see ample reasons of mutual benefit, it would be difficult to operate in such volatile areas. Land holdings have also

become smaller; land fragmentation is a serious issue, demands for "sons of the soil" compensation packages, especially in the form of permanent employment and the recent voices of profit sharing mode of leasing out the most wanted and scarce resource- land.

In this context, Government as well as the corporate sector and members of the civil society have expressed their views and positions on these critical areas. In the Indian context, the Government has laid a lot of emphasis on Corporate Social Responsibility initiatives urging the Companies to take up big ticket visible community welfare projects with focus on sectors like health, education, capacity building for self employment and environment management. The Department of Public Enterprise has recently come out with a CSR Policy guideline for CPSEs. The Department of Corporate Affairs are also issuing various directives and guidelines to strengthen corporate governance and create an environment where inclusive growth becomes a key agenda point of organisations.

### Concluding remark

We have all witnessed the Singur episode where companies like the TATAs despite being acknowledged to be one of the most respected Corporate Citizens know for their CSR investments had to face the ire of the local populace. Land acquisitions as already mentioned has become a very difficult subject and continue to be a bone of contention in years to come. As for OIL, the Company has faced the wrath of civil societies who raised a huge objection for carrying out seismic survey of the Brahmaputra river bed fearing that the same could adversely impact the river dolphins.

This is where, progressive companies, especially in the E&P business must be able to respond to the dynamic geo-political scenario and adopt very strong, pro active strategies to create an environment of long lasting trust and goodwill. E&P Companies must be able to respond to the needs of the stakeholders without distracting from the core activities. The environment is extremely dynamic and out of box thinking is the needed to handle such potentially volatile situations.



## The 5th Dimension!



"HYDERABAD 2012"

As a responsible corporate citizen, OIL has been able to respond to these ground realities by giving a strategic focus on corporate social responsibility, initiating myriad schemes and projects that benefits the target populace with visible positive impact. In fact, OIL's Project Rupantar which is all about supporting Self Help Groups and helping the members to find avenues for sustainable income generation has been identified as one of the twelve most successful CSR initiatives in the world oil & gas sector by the World Petroleum Congress (WPC) and was showcased in the 20<sup>th</sup> WPC held at Doha, Qatar from 4-8 Dec, 2011.

While it is a well accepted fact that "gone are the days of easy oil", boundary management is increasingly finding regular space in board room discussions. Therefore when a team of geophysicists venture out with their sophisticated equipment to logistically challenging and geologically complex areas, they also need to prepare themselves to handle the expectations of the local populace with whom they would constant interaction.

In many ways, the Geophysicists are the key brand ambassadors of the Company...their actions in many ways reflect the core philosophy and heart of the organisation they work for....they have to also simultaneously explore the 5th dimension and lay the foundation of a very healthy 4P.

In order to be able to explore the 5th Dimension, the geoscientists must be able to look beyond the world of geosciences. They have to develop a deeper understanding of the world around them, culture, politics, economics, land, environment etc. While they probe deeper into subsurface, they must be able to appreciate the surface level complexities, the challenge to handle "people's sentiments...the ability to empathise and the desire to be in sync with ground realities.