



## Does innovation at the base of the pyramid promote poverty reduction ?

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### Abstract

This article is set against the Pansera and Owen article titled; “*Framing inclusive innovation within the discourse of development: insights from case studies in India (2017)*”. While it agrees with the original observation that the discourse around Inclusive innovation is a cover for the promotion of ‘Western-Style Market-Approaches, it disagrees with the scepticism the original work attaches, both implicitly and explicitly to the play of WSMA in the field of inclusive innovation.

The article maintains that Western Style Market Approaches, are not only catalytic, but essential to the reduction of poverty through Inclusive innovation - thereby recognising the critical, explicit role WSMA must play in BoP innovation projects to ensure poverty alleviation by supporting scalability and ensuring long-term sustainability.

### Framing Inclusive Innovation

Inclusive innovation, defined in its most concise form is the innovation devised for, or devised by those who reside at the base of the economic pyramid; economically disenfranchised, largely

excluded from the market and often also socio-politically oppressed. In concrete terms, this is the 2.7 billion people who live on less than \$2.50 a day. (Prahalad and Hart, 2002) [See appendix]

The idea of inclusive innovation as means of development, particularly the reduction of poverty resides in an essentially neoliberal school of thought. Prahalad bases a strong argument for the need of inclusive innovation by arguing that poverty, and the associated deterrents for the poor to access goods and services are essentially the result of a market delivery failure, and calls for radical rethinking of the base of the pyramid as a vast, untapped market with potential for both wider social good as well as profitability.(Prahalad and Hart, 2002)

This is a departure from the traditionally state led or aid supported models of eradicating poverty - where those who reside at the base of the pyramid are elevated from being perceived as reliant upon of philanthropic support structures and are recognised (or rethought of) instead as being potential consumers (Prahalad, 2010), co-creators, and creators of goods and services (London and Hart, 2011). What is ideologically refreshing about inclusive innovation, as portrayed above, is the fact that it recognises creativity and the drive for growth as being an innate element of universal human capacity. It takes an encouraging departure from the journalistic victimisation and romanticisation of the poor and provides concrete incentives for the marketplace to push the frontiers of expansion and innovation.

## Defining Western Style Market Approaches

In the world of business, a market approach is the comparative means by which the value of a good or a service is determined. This definition however is limiting in the context of this article - therefore as inclusive and all-encompassing a definition has to be manufactured.

It would be useful to reengineer the phrase as the collection of means, tools and thinking by which a market is approached, i.e. exploited. It encompasses Business models, Workflows, Organizational Structures, Research methods, Human Resource Management, System Delivery methods to Sales and Marketing Strategies.

According to this definition, to those of us in the global north, our consumeristic lifestyles may be unimaginable without the overreaching effects and manifestations of market approaches that surround us. Their tacit embeddedness in everyday culture, work and political economy fades into the background through sheer ubiquity.

The real, definable contrast though, becomes very apparent set against the rurality of the global south. The rigid, thoroughly defined structures, routines and systems become visible in contrast to the fabric of frugal subsistence.

WSMA, (in agreement with Pansera and Owen) therefore are certainly not ideologically neutral or apolitical. They are hegemonic by nature, they contain a set of socio-political ideologies, ways of thinking, patterns of behaviour and a commodity fetishism which can, for example, potentially eat away at the human, social relationships in a rural community (Marx, 1932) - a generally agreeable point that is implicitly alluded to in the original article.

Nonetheless, In discussing the intersectionality between the alleviation of poverty, inclusive innovation and WSMA, to is vital to recognise and emphasise the sheer effectiveness of WSMA in the incubation, scalability, and long-term profitability and sustainability of enterprises driven by inclusive innovation, and how WSMA may be the only viable long term support

structures that are available for BoP enterprises to adequately and seriously combat poverty.

## Inclusive innovation and the political economy of the poor.

One of the critiques of defining poverty as a delivery issue, and by extension - portraying Inclusive innovation as an apolitical remedy for poverty roots from the idea that this market-framing of inclusive innovation overlooks the variegated socio-political antecedent factors of poverty, thereby failing to confront the issue at its core. (Winner, 1980 and Sachs, 1990).

In the original article, attention is brought to a more grassroots framing of inclusive innovation, where inclusive innovation becomes an “instrument of political empowerment”, (Smith et al., 2014) as opposed to an “enabler of market readiness” (Prahalad, 2010). It is important to note the relationship between the two framings.

Market readiness of a populace, either as consumers or producers in itself leads to a certain degree of political empowerment, and political empowerment in itself, leads to further economic freedoms and greater redistribution, one has to acknowledge the cyclical effect between political empowerment and market readiness.

For example, one could argue that the invention of the low cost mobile phone, aimed squarely at developing markets in Africa and South Asia has had a larger democratising effect, wherein the resulting improved access to information, ease of communication, organisation and connectivity has led to a certain degree of political emancipation of the masses.

Furthermore, it is the foundation laid by this innovation that has subsequently been utilised for further innovations for the BoP such as M-Pesa; a mobile based banking system which originated in Kenya, subsequently expanding to Afghanistan, South Africa and India.

Within two years of its initial launch in Kenya, 50% of M-Pesa users came from previously unbanked rural households. Analysis showed

that M-Pesa played a clear role in increasing the productive capacity of rural economies. The security of savings allowed poor households to withstand financial volatility. (Jack and Suri, 2014) A further, detailed study concluded that M-Pesa had contributed to the expansion of overall economic activity of rural and peri-urban areas. The proportion of households excluded from banking services fell from 41% in 2006 to 17.4% in 2016, with a significant proportion of users being women. (Plyler, Haas and Nagarajan, 2010).

Savings would result in rural women being able to seek pathways for further education, for themselves and their dependants, which would help alleviate generational poverty, particularly of the girl child. An accumulation of personal funds, or ease of access to borrowings has the potential to break the patriarchal chain of dependency, and result in the wider socio political emancipation of a group which particularly in a rural setting has historically received unequal benefits from state education, healthcare and public goods.

### **Poverty, Its intersectionality with Innovation and WSMA:**

It would be remiss of any article on inclusive innovation to overlook India's contribution to the field in both concrete and ideological terms. The terms *Juggad* and *Gandhian Innovation* (Malhotra, Kleiner, Geller, 2010) are two strains of inclusive innovation which reflect the Indian understanding and optimism of technology and innovation as means of improving the lives of the poor.

India also presents a strong case for the explicit involvement of Western Style Market Approaches in BoP innovation. Leading Indian thinkers in the field of inclusive innovation, such as C. K. Prahalad and Raghunath Mashelkar are strong advocates of both the strategic and ideological application of western style methods of management and practice into rural enterprises. They also resoundingly reject the post-developmental scepticism presented in the Pansera and Owen article instead opting for a much more pragmatic and positive outlook.

Pansera and Owen present, as one of the contestations for the *market readiness* framing of inclusive innovation the idea that it might result in “ increasing the vulnerability of the poor, exposing them to the volatility of a free market economy and creating new forms of social oppression and dependencies (Federici 2001; 2010)”

One has to raise the seemingly flippant, albeit realistic questions as to whether certain forms of dependencies are better than others ? or newly introduced forms of dependencies replace or merely add to the old ? or how realistic the attempt of ‘shielding’ the poor from the ‘volatile’ marketplace could be, and if a long-term battle against poverty could be waged by social engineering alone.

The long-term battle against poverty, both relative or absolute cannot be fought in an environment which is isolated from the market forces – it has to be fought within the superstructures of the existing system of global capital, with the strict understanding that it can be severely challenging and volatile.

The term *market readiness* (Prahalad, 2010) implicitly contains within it the qualitative notions of inventiveness, proactiveness, organisation, and adaptability - even in the surface level analysis as to why unforeseen crop failure might lead to mass starvation, or monsoon seasons might drive fishing communities into cyclical poverty, or mechanisation might lead to structural unemployment of certain rural or peri-urban skilled labour, what is quite apparent is the lack of the aforementioned qualities, often at all levels of political or social organisational hierarchies at the base of the pyramid – arguably due to the fact traditional forms of labour or subsistence agriculture lacks the dynamism to withstand and adapt to the often unpredictable turbulence of the Anthropocene.

An entirely social justice based framing of inclusive innovation is an admirably optimistic one - but one only needs to follow the incremental development of such projects

(particularly the one mentioned in the original article) to see how they might scale poorly in the long run, how the drive and the momentum might decline where the financial incentive begins to stagnate or disappear.

Shielding inclusive innovation from the marketplace also insulates the space for entrepreneurship or production from competition - which is the strongest singular driver of innovation - thereby severely impeding the long-term financial sustainability and adaptability of these projects.

Market approaches have the ability to edify and foster marginalised communities into acquiring and sharpening the qualities of organisation, adaptability and inventiveness, which are not typically provided in inherited forms of traditional knowledge, and traditional knowledge, particularly agricultural, could have diminishing abilities to withstand the effects of climate change, mechanisation and shifts in consumer demand, whereas the organisational, calculating, innovative mindset of WSMA might help alleviate poverty in the long-term, by making communities more adaptable and resilient to change. This is not to say that rural communities must move away from traditional crafts or trades or agriculture – but innovatively adapt and augment systems of production and management to traditional trades, making them both resilient and competitive in the long run.

### **Measuring the Poverty Reducing Outcomes of Inclusive innovation**

Whilst certain post-developmental sceptics remain doubtful if innovation at the base of the pyramid would aid the alleviation of poverty, often by referring to a lack of sufficient statistical backing to prove otherwise – the point has to be raised that the overall shifts in the social, political, economic and cultural dynamics at the base of the pyramid supported by inclusive innovation will likely allude strictly quantitative statistical analysis.

For example, frugal innovations in prosthetics such as the Jaipur foot (Kanani, 2011), not only contribute to the economic productivity of a reduced mobility individual, but also changes a larger mindset of stigma attached to disability. Reduced physical mobility of one household member in a rural, impoverished family also inevitably leads to the reduced economic mobility of the entire household. The direct economic utility of the prosthetic to the individual user, taken in isolation, is not a sufficiently revealing statistic in itself.

Take for another example the MAC 400 portable electrocardiogram (ECG) machine, wholly conceived, designed and produced in India by GE. It combines both the amoral nature of the market to extract rent from the inelastic demand for essential healthcare with the inclusive notion of Chandian innovation to strip down a product to its bare essentials. The result is a product which sells at third the cost of alternatives in the Indian market, reducing the cost of a scan to less than a bottle of water, rapidly expanding to other South Asian and African markets. (Market-Relevant Design: Making ECGs Available Across India, September 2018).

The multiplier effect of a healthy population, which has to spend less disposable income on healthcare is a positive boon for the socioeconomic mobility of the poor. MAC 400 is only one of the many examples of how frugal innovation has revolutionised healthcare in the global south.

*"If we provide a hepatitis B vaccine that is 40 times cheaper, cataract eye surgery 100 times cheaper, open-heart surgery 20 times cheaper and an artificial foot 300 times cheaper, wealth and health for all can be a reality," (Malshekar, 2012)*

Frugal innovations of this nature has the ability to contribute to the state's attempt to provide public goods for the base of the pyramid, in fact – there is a clear advantage for the developmental state in the global south to also adapt the spirit on inclusive innovation – not only in the creation of public goods and services, but also systems of administration and governance.

Similarly, women centric innovation incubators, particularly the ones which focus on reproductive healthcare and hygiene - not only improve the immediate economic conditions of women, they also disrupt exclusionary household gender dynamics which, for instance in India, keeps the labour force participation for women at 28.5% compared to 82% in men. (ILO, 2017)

While the explicit poverty reducing effects of Inclusive innovation on women can be statistically presented, the larger implicit contribution of inclusive innovation in the overall socio-economic emancipation of women can easily be lost in the ether of development statistics.

## Conclusion

While the essay discusses several examples of how Inclusive innovation might alleviate certain forms of poverty, the aim is not to romanticise the market as being a pathway to emancipation. Nonetheless, whilst remaining acutely aware of its amoral nature, a utilitarian argument can be made that the functional elements within the organisational structure of western style market approaches can be creatively integrated into spaces of economic dysfunction and poverty. This process of integration in itself, is a form of innovation – and it would benefit, not only in revitalising the antiquated production systems of the global south, but also the sluggish and inefficient bureaucracies that perpetuate poverty through dysfunctional governance.

The argument that further marketisation of the global south will not resolve the issue of inequality and level the playing field is certainly valid, also – bidding on technology or innovation alone for the global south to 'catch

up' with the prosperous north is positively quixotic.

Inclusive innovation is not a remedy to the inherent flaws of the neoliberal structure, what it promises though is a pragmatic and scalable toolkit of whose application at the base of the pyramid can enable those who reside within it to incrementally improve the quality of their lives.

## Appendix

### [1] **The Bricks of Pyramids and Bases: Innovation for and at the base of the pyramid.**

The working logic of the idea is the inverse relationship between *wealth to scale* in the vertical order of an unequal economic structure. *Wealth to scale*, in the Prahaladian reading constitutes of *income to individuals*, permeating the very real boundaries of the nation state.

A pertinent question can be raised here – could we reimagine this ratio, for instance in terms of inequalities between nation states? Could we not then also redefine the pyramid in a way which better represents the unequal geopolitical power structures that often perpetuate poverty and underdevelopment?

For instance, the United States, which houses less than 5% of the world population, consumes nearly 20% of its energy. Whereas India, which houses nearly 20% of the world's population consumes just about 5%. In light of this, take into consideration India's Chandrayan Space project, which cost only US\$54 million in comparison to US's counterpart, Grail at US\$496 million, does Chandrayan not embody the philosophy and contain all the lineaments and the characteristics of Inclusive or frugal Innovation?

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