ABSTRACT

Exchange and interpersonal relationships are central to the functioning and sustainability of socio-economic activities, including innovation. Grassroots innovations (GI) are dynamic, relational phenomena that evolve with grassroots innovators’ beliefs, expectations and obligatory relationships for varied resources, and the actualisation of their desire to make novel and beneficial products. In this paper, the dynamics of exchange and interpersonal relationships that underpin the GI phenomenon are explored through the lens of exchange theory and the consideration of the psychological contract. While exchange theory provides an explanation for the interdependent and dyadic socio-economic relations present in GI, the psychological contract provides a view on the perceptions and expectations that are embedded in exchange and innovation activities. The research endeavours to examine the subjective reality of the innovation experiences of the grassroots innovators; thereby discerning the dominant form of exchange and socio-economic structure that fosters GI from ideation to commercial scaling. Through phenomenological exploration and detailed thematic analysis of the innovation experiences of the thirteen Indian grassroots innovators, the research determined the nature and spirit of the relational commercial exchanges entailing and fostering GI. The paper begins with a discussion of the theoretical foundations of the research. Thereafter, the paper briefly discusses the research methodology and exchange dynamics in GI. In assimilating the research findings, the paper enlists the features of exchanges embedded in GI phenomenon and highlights the capacity of relational commercial exchanges in fostering GI. The paper further proposes, through this discussion, an interpretive framework for understanding how exchange influences the development of GI. Finally, the paper concludes with an identification of the dynamics of exchange within the GI process, and ascertains the necessary conditions for GI to flourish in commercial space.

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Keywords: Grassroots innovations, ideation and opportunity recognition, lived experiences, psychological contracts.

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INTRODUCTION

Grassroots innovations (GI) are dynamic, relational phenomena that evolve with grassroots innovators’ beliefs, expectations, resource availability, and the desire of the innovator to produce novel and beneficial products. These innovations are primarily conceived and developed through the acumen of the lower-income people at the bottom of the pyramid as a method of solving problems present in local communities and those nearby (Joshi et al. 2015). According to Gupta (1996), these innovators spearhead innovation development, production and consumption with the support of various institutions such as Non-Governmental Organizations or publicly funded research laboratories. GI, in this paper, is understood to mean science and technological development at the grassroots level.

The main purpose of this paper is to highlight the relational commercial exchanges that underpin the GI phenomenon. The paper starts off with the discussion of the theoretical foundations of the research. Thereafter, the paper briefly discusses the research methodology and exchange dynamics in GI. In assimilating the research findings, the paper enlists the features of exchanges embedded in GI phenomenon and highlights the capacity of relational commercial exchanges in fostering GI; and it further proposes, an interpretive framework for understanding how exchange influences the development of GI. Finally, the paper concludes with an identification of the dynamics of exchange within the GI process, and identifies the necessary conditions for GI to flourish in commercial space.

THEORETICAL FRAMEWORK
In studying the prevalent social structures that affect the economic actions of an individual or firm, exchange theory has great promise. Social structure can be a: ‘configuration of social relations and positions, or the foundation that underlies all of social life and history, and a multidimensional space of the differentiated social positions of the people in a society or other collectivity’ (Blau 1975, p. 14). Structure can also be defined as ‘patterned arrangements of the units and social relationship among the members in a system’ (Rogers 2003, p. 24). Explaining exchange theory, Collins (1988, p. 412) states that: “human beings have the capacity to create or negotiate whatever they can at any moment in time, they are free and constrained actors but they act in structured situations, so that the consequences and conditions of their creativity and negotiation are nonetheless patterned by larger relations which are beyond their control.” The strength of this theory lies in its explanation of social and economic relationships.

Cropanzano and Mitchell (2005) posit that theorists agree on the key tenets of exchange theory: that social exchange constitutes actions contingent on the rewarding reactions of others, and that over time it provides mutually rewarding transactions and relationships. Exchange theory combines the constructs of reciprocal obligation and psychological contract. Additionally, understanding how patterned role expectations govern an individual’s actions provides insights on innovators’ behaviour (Cécora 1999), and equity-based expectations embedded in psychological contracts allow for understanding the notion of fairness and equity in exchange (Rousseau 1989). This theory also helps to discern the extrinsic motivations of the socio-economic actions of an actor. Hence, in this research, exchange theory is used to understand the reciprocal obligations operationalising GI.

Psychological contracts entail beliefs or perceptions that are ongoing, dynamic and implicit in nature, based on the principles of reciprocity and exchange (Joshi et al. 2015). Here, the psychological contract is a useful guide to discerning the factors affecting actors in construing their personal relationship with institutions (Rousseau 1989; Rousseau and McLean Parks 1993; Thompson and Hart 2006), contractarian ethics (Donaldson and Dunfee 1994) and their perceptions of mutual obligations (Thompson and Hart 2006). These contracts are useful in determining the intrinsic aspects of the exchange relationship at the interpersonal level, and are useful in analysing both the expectations and outcomes of the exchange relationship (Joshi et al. 2015). Thompson and Bunderson (2003) state that psychological contracts primarily driven by economic exchange are transactional in nature, whereas those driven by socio-emotional aspects are relational in nature and exchanges not limited to self-interest or driven by principle or cause are ideological in nature. According to Rousseau (1989), psychological contracts evolve from the value people generally place on reciprocity. Overall, the theory of exchange and psychological contracts enhance understanding of the individual and inter-personal exchange behaviours.

Exchanges result from socio-economic relations. The benefits of negotiated deals are reaped through the enactment of an exchange relationship (Kauffman and Dant 1992). Exchanges in pastoral communities are usually based on reciprocity, co-operation and fairness. In general, exchanges are bilateral and bear reciprocal obligations, interdependency, a folk belief and a moral norm (Cropanzano and Mitchell 2005). Moreover, the character of a relationship between exchange partners affects the processes of exchange and the types of exchange (Blau 1964). Exchange entails non-contractual behaviours (Chen and Choi 2005) based on reciprocal social obligations, such obligations beget feelings of moral obligation and trust (Blau 1964). Meeker’s (1971) six social exchange rules - reciprocity, rationality, altruism, competition and status consistency - help discern the obligations, and give insight into the relational aspects of the exchange involved in GI (Joshi et al. 2015). According to Meeker (1971), rationality refers to the use of logic to determine the likely consequences (outcome/ends), and how to make the things that are valued. However, the rule of altruism proposes that an individual does not always behave rationally, at times acting to benefit another person at a cost to the self (Meeker 1971). Status consistency relates to the sharing of benefits based on one’s position in terms of race and status in a social group. Reciprocity in exchange is not manifested for individual gratification, and therefore strict accounting of such exchanges is difficult (Blau 1964). Trust can however serve as a governing mechanism as it allows for the identification of actors’ expectations and the outcome of economic and social exchanges in relation to these expectations. This contributes to an understanding of exchanges (Blau 1964). Trust is also important, constituting a foundation for the development of stability in social and economic relations, and subsequently creating enduring social patterns of reciprocity (Blau 1964). It is important to note that trust is a psychological contract that results from a belief that contributions will be reciprocated; a relationship exists where the actions of one party are bound to those of another (Rousseau 1989).

To comprehend the exchange and interpersonal relationship that expedites GI development, this paper uses the concept of commercial exchange, as it combines relational behaviour with social, economic and emotional aspects of contracts for innovation. Commercial exchange is driven by consent. A unique governance structure for commercial exchange can be garnered by combining three control mechanisms: price, authority and trust (Kauffman and Dant 1992). Trust is a relational manifestation of solidarity, and is integral to relational continuity and governance (Kauffman and Dant 1992).
Freeman and Soete (1997) state that innovation occurs only when there is a commercial transaction of a new or enhanced product, process, system or device. The notion of transaction used here is skewed towards a contract that is usually short-term, referring only to monetary, economic and market facets, and overlooking relational, emotional and other moral aspects such as altruism, group gain and community well-being. Transactions are sub-sets of commercial exchange and the later are functional only through exchange relationships and rules that can be explicit or implicit, cognitive, formal and normative (Raven and Geels 2010). Transactional exchanges are usually contractual, impersonal, rational and short-term, and guided solely by economic and monetary exchange objectives. Conversely, relational exchange is long-term, strategic and affects both transactional and relational aspects of institutional arrangements (Haeussler 2010; Kaufmann and Dant 1992; Kaufmann and Stern 1988).

RESEARCH METHODOLOGY

Exchange and interpersonal relationships are central to the functioning and sustainability of socio-economic activities, including innovation. Innovation includes human endeavour that is unique, unconventional and co-operative, and not just an intellectual scientific pursuit (Steiner 1995). Therefore, innovators’ views on their innovation experience are important, because such views reflect the values and beliefs of individuals in a social system (Rogers 2003). A social system is a ‘set of interrelated units that are engaged in joint problem solving to accomplish a common goal’ (Rogers 2003, p. 23). Thus, to explore the individual experiences of participants in detail, qualitative methods within interpretive paradigms are very useful (Denzin and Lincoln 2011).

Thirteen individuals involved in innovation pursuits at the grassroots level and who were identified as grassroots innovators by the National Innovation Foundation (NIF), an autonomous body of Department of Science and Technology, Government of India, were interviewed for this study. These innovators are all different, and the lived experience of each is unique. Therefore, assuming that all grassroots innovators have the same experiences of innovation generation, development and diffusion is erroneous. Attempts were made to identify the unique experiences of the innovation process, and pursuant to this, each grassroots innovator has been considered on an individual level. In terms of broad categorisation, distinctions were made according to the terms innovation action, environment, interaction and actor. In mining the subjective views and experiences of the grassroots innovators, the underpinning exchange dynamics and interpersonal relationships were revealed through the exchange and psychological contract theoretical lens.

EXCHANGE DYNAMICS IN GRASSROOTS INNOVATIONS

The lived experiences demonstrated that relational exchanges nurture GI and can enhance social capital. It was observed that reciprocal commitments in innovation actions make each party accountable, and such reciprocity serves as a governing mechanism in the contractual agreement. Further, it ushers long-term personal and socio-economic change into the lives of grassroots innovators. The embedded social-psychological value in GI is a means for social change and social empowerment (Kumar and Bhaduri 2014).

The research findings suggest that innovations at the grassroots are made possible through individual innovative behaviour and interpersonal relationships, and are also affected by socio-economic structures. There are instances in which grassroots innovators have been able to mobilise their innovations and reap monetary and non-monetary benefits at the local level prior to institutional scouting and support. In such instances, support from family, friends, villagers and users were central in mobilising GI. It is observed that the psychological and emotional support from the community has enhanced grassroots innovators’ perceived ability to innovate.

Socio-economic exchange experiences varied depending on the type of innovation, level of family support, background and grassroots innovators’ own attitudes and capabilities. A few grassroots innovators mobilised their prototypes through informal, personal networks. At this stage, sales were insignificant. The majority of grassroots innovations gained an initial market through referral. Although contextual aspects (economic, technical and social factors) set the scene for innovation diffusion (Agarwal 1983), personal networks and word-of-mouth formed the primary means of innovation diffusion (Rogers 2003).

Cropanzano and Mitchell (2005) posit that exchange relationships evolve over time into trusting, loyal and mutual commitments. Trust and reciprocal commitment to tangible and non-tangible benefits can foster enduring social relations (Blau 1964). A belief in reciprocity and an individual’s belief in an obligation of reciprocity is a tenet central to social and psychological contracts (Rousseau 1989). Such psychological contracts are vital to exchange dynamics in GI, whereby individual grassroots innovators spearhead exchange decisions under a constrained socio-economic environment.

Grassroots innovators sensed the need for stronger social relations and monetary resources, and stressed the ethical means of prospering through innovation for an idea to evolve into an innovation and be successful in the marketplace. Timely institutional support and recognition motivated grassroots innovators to
continue, despite initial failures or hardship. Institutional support in the form of recognition and monetary rewards helped grassroots innovators forge stronger ties with their families. Recognition and respect provided by family, friends, community and institutions mattered more than rewards and other monetary benefits.

There were cases where ideation and opportunity-recognition occurred through the sole efforts of the grassroots innovator. In these cases, the GI was scaled and fostered through the efforts of the grassroots innovator’s children. Grassroots innovators who established their businesses based on their GI increasingly involve their children in the production and marketing of the innovation. Grassroots innovators also revealed that relationship dynamics and capabilities are central to fostering and sustaining their GI. Overall, the contribution of family members was central to opportunity recognition, prototype development and the scaling of GI. The ideation and opportunity recognition emerges from the self, family members; friends and community members (see Figure 1).

Figure 1. Sources of support in Ideation and Opportunity Recognition (Self Compiled)

It is evident that relational exchanges with family and friends helped grassroots innovators withstand setbacks during the ideation and opportunity-recognition stages. Family members—especially wives and children—play a pivotal role in facilitating GI and most of the grassroots innovators acknowledged the significance of the socio-emotional support. A few confessed that their passion for innovation and problem-solving forced their parents, wives and children into hardship. In some cases, friends and villagers played an instrumental role in product development, opportunity recognition and scaling. A few grassroots innovators shared their experiences of chance meetings with strangers who not only recognised the value of their innovations, but also motivated them and connected them to institutions that fostered or promoted innovation.

The majority of economic relationships with customers are driven by the idea of serving, rather than making profit. Grassroots innovators who come under the category of ‘farmers’, expressed the desire for their innovations to be beneficial to others. Providing affordable innovative solutions to the farming community was their primary motivator.

These innovations not only make farming and related work easier, but they also increase overall productivity. All grassroots innovators believed in sharing knowledge, and that their innovations should enhance others’ livelihoods as well as encourage others to innovate. However, some grassroots innovators resented copying, and acknowledge the importance of patents. Each grassroots innovator recognised the role of relational, non-monetary exchanges in their innovation journeys. All thirteen grassroots innovators reiterated that their personal traits and social relations were key elements driving their innovation pursuits.

At the onset of the innovation journey, grassroots innovators either used their personal savings or borrowed money from family, friends or money-lenders. Four grassroots innovators accumulated huge debts developing their innovations. Lack of financial or technical help at the prototype development or ideation stages were the major constraining factors. Lack of government subsidies in farm-related equipment, transportation costs, imitation, changing trends in farming and altering market conditions were inhibiting factors, but a few grassroots innovators recognised opportunities within these situations.

All grassroots innovators acknowledged the significance of monetary resources, but stated they put more importance in trust, relationship continuity and the reciprocity embedded in the transaction and contract. Monetary resources relate to tangible financial resources and benefits, such as monetary rewards, loans, patents,
royalties, profits and sales. These resources operationalise and provide transactional dimensions to the exchanges. Formal means of governing relationships—such as the signing of contracts—arise only when there is commercial scaling, patenting, sale of licences and the availing of design rights. At the initial stage of innovation, grassroots innovation source funds through varied channels (see Figure 2). Many grassroots innovators accrued resources for GI based on their goodwill. Three of the grassroots innovators accumulated resources by demonstrating the benefits and usefulness of their innovations in the agricultural fairs and at some community workshops. Non-monetary resources or relational exchange played an integral role in all stages of GI. These resources not only allowed grassroots innovators to proceed further in their innovation journey, but also fostered the ideation, prototyping and commercial scaling of GI.

Figure 2. Sources of Funding at Seeding/Initial Stage (Self Compiled)

GI pivots on reciprocal obligations, rewards, resources, roles, responsibilities and ideologies (Joshi et al. 2015). In this research, grassroots innovators’ behaviours regarding innovation pursuits are found to be rational and altruistic. It was also observed that belief systems affect exchanges and interpersonal relationships. Although these innovators do not innovate with the motive of economic gain, the context of innovation in a frugal environment means that they do rationalise the means of innovation accordingly. The grassroots innovators demonstrated the capacity to incur huge financial costs while innovating for the community. These costs are inclusive of monetary and non-monetary components, such as time away from the family, household resources or social relations. Grassroots innovators are economics actors that optimize utility; at the same time, they are social actors with multiple roles and responsibilities.

Overall, GI exchanges entail transactions and contracts, as well as the learning and sharing of non-monetary and monetary resources. Recognition, appreciation, rewards, trust and exposure from institutions provided grassroots innovators with a platform to showcase their innovation skills and pursue their dreams. Non-monetary resources included advice, awards, motivation, materials, space and access to resourceful people, institutions and the market. The exchange dynamics embedded in the GI journey reflect an intricate mix of reciprocity, respect, self-interest and trust. At the ideation, opportunity-recognition and prototyping stages, most exchanges and interpersonal relationships are driven by socio-emotional relationships. The socio-economic exchanges underpinning GI were broadly observable as founded on trust, a sense of reciprocity, mutual obligations and respect for each other.

Relational Commercial Exchanges Dynamics

Innovation constitutes innovators’ self and dialectical action of innovating, inclusive of human nature and innovation artefacts (Hellström 2004). Evaluation of the success of such innovations, innovations that foster
democratic engagements and empowerment, goes beyond merely analyzing economic efficiency (Davies 2012). This is largely because grassroots innovators orient innovation differently to mainstream, formal-sector innovators. There are economic and socio-emotional outcomes of exchange. The former are those that address monetary needs and are tangible, and the latter are those that address one’s social and esteem needs, which are often symbolic in nature (Croppanzano and Mitchell 2005). Despite frugal financial capital, grassroots innovators-turned-entrepreneurs employ social, natural and ethical capital, reinforcing values of moral, community and ecological conservation (Gupta 2013). Such externalities are hard to quantify but they do contribute to the solidarity and well-being of the individual and the community.

The grassroots innovators who participated in this study reflected a state of being in which they constantly live and thrive in the world of divergent expectations, multiple roles, and multiple identities. For them, the notion of benefits transcends all personal gains and self-interest. Grassroots innovators engage in commercial relational exchanges for enhancing socio-economic and emotional well-being of the community at large. All the grassroots innovators were empathetic and displayed a strong belief in ethical conduct, they did share views on profits, patents, consumers and imitation. A few strongly believed in protecting their innovations, earning their fair share and sharing with their communities.

The research also found that the exchange arrangements in GI phenomenon were hybrid in nature, comprising of both discrete individual transactions and relational exchange. Even though the social system was instrumental in the development and scaling of GI, grassroots innovators faced multiple social, emotional, economic and moral challenges at the ideation and prototype development stages. Grassroots innovators work under various social, economic and cultural constraints and these affect their innovative behaviour (Kumar and Bhaduri 2014), especially at the prototyping and commercial scaling stage of GI. These innovators emerged as responsible, resilient, enterprising and innovative individuals. Grassroots innovators agreed that their innovation gained traction with greater market access, IPR protection and recognition, and that this occurred only after they were scouted or connected to the institutions in the innovation network.

Joshi et al (2015) identified that socio-emotional, economic and ideological exchanges are embedded in GI. Ideological exchanges derive from an altruistic frame of mind, belief in good karma and moral conduct. Further, relational commercial exchanges blend market and non-market aspects of socio-economic exchanges and relationships. Table 1 depicts the attributes of three different types of socio-economic exchanges. The column titled ‘relational commercial exchange’ lists the attributes of socio-economic exchange dynamics discerned from the lived experiences of grassroots innovators. Relational commercial exchange entails economic, socio-emotional and ideological exchange relationships and not just transactional and relational relationships.

**Table 1. Exchange fostering Grassroots Innovations**

<table>
<thead>
<tr>
<th>Transactional Exchange</th>
<th>Relational Exchange</th>
<th>Relational Commercial Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary</td>
<td>Social contract</td>
<td>Individual discrete transactions and relationships</td>
</tr>
<tr>
<td>Contractual</td>
<td>Reciprocal moral and social obligation</td>
<td>Personal and partnering</td>
</tr>
<tr>
<td>Rule governed</td>
<td>Relational focus</td>
<td>Role focus</td>
</tr>
<tr>
<td>Impersonal</td>
<td>Non-contractual</td>
<td>Relational contractual</td>
</tr>
<tr>
<td>Linear</td>
<td>Ideological, altruism, group gain</td>
<td>Ideological Social and Moral responsibility</td>
</tr>
<tr>
<td>Short-term</td>
<td>Role-governed</td>
<td>Reciprocal economic, social and moral obligations</td>
</tr>
<tr>
<td></td>
<td>Long-term</td>
<td>Trust- based</td>
</tr>
</tbody>
</table>

The lived experiences of grassroots innovators demonstrated that these innovators are equipped to act upon social and psychological contracts. Trust surfaced as a critical element in relational commercial exchange in GI. It not only facilitated exchanges but also played an important role in governing them. For developing GI, grassroots innovators value exchange relationships that entail ideological (Thompson and Bunderson 2003) and transpersonal (Burr and Thompson 2002) psychological contracts. While the ideological contract arises from an individual’s desire to further a highly valued and altruistic cause (Thompson and Bunderson 2003), the transpersonal contract arises from the desire to collaborate, therefore benefiting the rest of the society (Burr and
Thompson 2002). Implicit contracts based on mutual understanding and social roles affect the innovation decisions of grassroots innovators.

The subjective perceptions, social norms and expectations of the grassroots innovators also affect the content and character of the exchange and interpersonal relationship for fostering innovation. Incorporating the process in which ideology influenced exchange at the grassroots into the interpretive framework of exchange relationship develops an understanding of the psychological contract embedded in the exchanges fostering grassroots innovation (see Table 2). This interpretive framework also opens up possibilities to understand the ethics, innate expectations, governance, and benefit sharing aspects involved in developing and fostering grassroots innovation for commercial purposes.

Table 2. Interpretive framework for Exchange Relationship

<table>
<thead>
<tr>
<th></th>
<th>Transactional</th>
<th>Relational</th>
<th>Ideology-infused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>Narrow</td>
<td>Comprehensive</td>
<td>All-encompassing</td>
</tr>
<tr>
<td>Resources</td>
<td>Economic</td>
<td>Socio-emotional</td>
<td>Ideological</td>
</tr>
<tr>
<td>Duration</td>
<td>Specific</td>
<td>Indefinite</td>
<td>Variable</td>
</tr>
<tr>
<td>Individual’s Obligation</td>
<td>Formal, Specific</td>
<td>Generalised,</td>
<td>Participatory</td>
</tr>
<tr>
<td>Role requirement</td>
<td></td>
<td>Role obligation</td>
<td>Mission/cause led</td>
</tr>
<tr>
<td>Ethical Principle</td>
<td>Self-Interest</td>
<td>Commitment</td>
<td>Community Interest</td>
</tr>
<tr>
<td>Beneficiary</td>
<td>Individual/Self (Me)</td>
<td>Self and Community (We)</td>
<td>Society or Nation at large (All)</td>
</tr>
</tbody>
</table>

Source: Adapted from Thompson and Bunderson (2002)

Some GIs were developed with such arrangements among friends, family members, institutions and individual grassroots innovators. Reciprocity for development and diffusion of GI was mainly affected by a sense of gratitude, mutual commitment and trust. Further, from the narrative accounts of the innovation experiences it was discerned that grassroots innovators prioritize their passion and innate need to innovate. Personal, moral, economics (market), institutional and social factors influence the exchange decisions for fostering GI in commercial space. The relational commercial exchange inherent in GI entails economic, socio-emotional and ideological exchange relationships, in addition to social relationships; and it takes into consideration the moral fabric of the GI community, and the idea of reciprocal fairness.

Against the backdrop of the above discussion, the dynamics of relational commercial exchange for fostering GI is outlined below. Discussing the anatomy of exchange, Anderson, et al (1999), argue that the objective of exchange defines and directs the relevant exchange network, process and content. The perceptions, obligations, motivations and expectations shape the exchange dynamics in GI. Exchange relationships, resources, rules and the innovation network constitute relational commercial exchange dynamics, shaped through motivations, expectations, perceptions and obligations (see Figure 3). As these dynamics originate in the grassroots innovators’ situated reality, they serve as a guide for devising a scaling mechanism for the grassroots innovation.

Figure 3. Dynamics of Relational Commercial Exchange (Self-Compiled)
CONCLUSION

The exchanges and interpersonal relationship embedded in grassroots innovators’ lived experiences of innovation are largely trust based reciprocal, co-operative and collaborative relational commercial exchanges. Grassroots innovators’ exchange relationship experiences were intriguing, and through the examination of the lived experiences of participants it became clear that reciprocal obligation and solidarity underpin GI development. Furthermore, in the earlier stages of innovation, participants began their innovation by balancing social relations, responsibilities, social norms and protocols. Grassroots innovators were driven by altruism and believed in co-operation and co-habitation rather than competition. They struck a balance between commercial and communal needs through reciprocal behaviour, mentoring, knowledge sharing and providing jobs and training to their villages and communities. These innovators are cognisant of the profit potential of their innovations, and recognize the opportunities for their innovations in their community.

The desirability and feasibility of the innovation at the grassroots is facilitated through relational commercial exchanges, therefore, interpersonal or relational dynamics are central to GI augmentation. The GI process is mainly spearheaded by the grassroots innovator and facilitated by friends, family, community and institutions. The lived experiences revealed that the majority of grassroots innovators expected to capitalise on their innovations improve their livelihood and share the benefits with the community. They engaged in relational commercial exchanges for enhancing socio-economic and emotional well-being. Overall, exchange and interpersonal relationships are driven by beliefs of grassroots innovators and their capability to appropriate scarce resources for innovation.

ENDNOTE

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