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# **Review on the Role of Agriculture Cooperatives in Optimising Gross National Happiness**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. Author TD designed the study and wrote the protocol. All authors managed the literature searches and wrote the first draft of the manuscript. All authors read and approved the final manuscript.*

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## **ABSTRACT**

Gross National Happiness (GNH) is Bhutan's development philosophy emphasising the happiness of people instead of seeking economic prosperity alone. Researchers have studied GNH in relation to different fields such as health, education, etc. However, as studies on the impact of a business model like Agriculture Cooperatives (ACs) on GNH are scarce, the authors felt the need to fill this study gap. The study aims to review the roles of ACs in optimising GNH. The "proposed GNH of Business"—a framework developed by Centre for Bhutan Studies and GNH—guided the review. In this study, we presented direct and indirect evidence of ACs contributing to different domains of the GNH, thereby, improving both workers' happiness and organisational conditions for happiness. The review also indicates that functional or successful ACs have the potential to optimise GNH in the country. However, empirical studies are required to confirm these literature-based findings.

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## 1. INTRODUCTION

Bhutan, often known as the last Shangri-La [1], is a Buddhist kingdom with an area of 38,394 km<sup>2</sup> and population of ~768,577 [2]. Bhutan did not experience external influences until recently, because it was exposed to the outside world from its self-imposed isolation only in the 1960s [3]. Thus, traditional Buddhist principles [4,5], still influence the Bhutanese economy, politics, and socio-culture. Buddhist principles embedded in Bhutanese culture and traditions are the foundation of Bhutan’s development philosophy— the GNH [6]. Unlike in other countries where Gross Domestic Product (GDP) measures the country’s development, GNH measures the country’s development in Bhutan. In Bhutan, therefore, happiness is a principal factor measuring development rather than GDP.

Over the years, GNH has been gaining popularity among scholars in the fields of education [7], health [8], environment [9], etc. However, studies integrating business operations like ACs and GNH are scarce. In this study, we defined ACs as cooperatives related to crop, livestock, and forestry. In the recent decades, the Royal Government of Bhutan has been promoting ACs as a part of agricultural development in the country [10]. ACs development being a recent phenomenon in Bhutan [10], their role in

optimising GNH is still not clear. While the Constitution of Kingdom of Bhutan mandates the State to adhere to GNH, “business entities (such as ACs) also promote necessary conditions for workers and the society at large to pursue happiness” [11]. Studying ACs through the lens of GNH would help in understanding their existing roles and how their promotion can optimise GNH. Therefore, the objective of this study is to review the roles of ACs in optimising GNH.

We adopted the “proposed GNH of Business”, a framework developed by Centre for Bhutan Studies and GNH [11] for two reasons. Firstly, the “proposed GNH of Business” consists of nine domains of GNH (Fig. 1) and it can assess ACs as per the GNH framework. Secondly, there are other similar frameworks, including Corporate Social Responsibility and Triple Bottom Line, however, some frameworks are too specific, while others do not consider happiness as business’s end goal [11]. We reviewed academic, scientific, and grey literature closely related to GNH and ACs. Thus, we excluded literature surveys of cooperatives other than crops, livestock, and forestry. In the following, we presented the roles of ACs on nine domains of GNH grouped under two sub-headings: worker happiness and organisational condition for happiness (Fig. 1) followed by the conclusion.

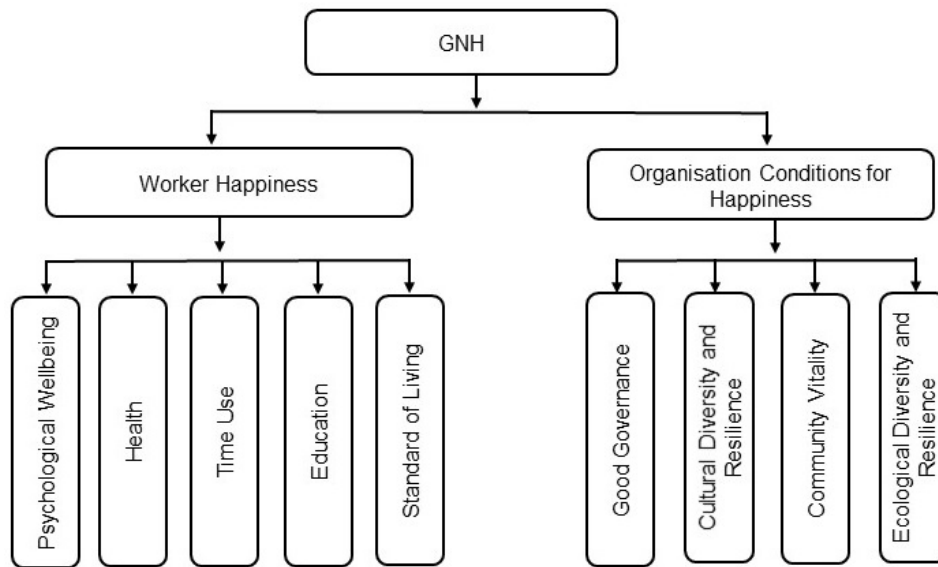


Fig. 1. The “proposed GNH of Business” with nine domains of GNH grouped under two assessment components (with minor changes) from [11]

## **2. LITERATURE REVIEW**

### **2.1 Worker Happiness**

#### **2.1.1 Psychological wellbeing**

ACs treating members like a family help to improve the psychological wellbeing of their members [12]. ACs being member-oriented ventures, they consult, include, and listen to their members in making important decisions. These close relationships strengthen trust and increase the level of satisfaction among members of the cooperatives [13]. Members' regular interactions ensure better communication, networking, and trust among one another. Such close-knit platforms reduce workplace discrimination in contrast to the capitalist multi-national firms [14]. Cooperatives help people to face adversity, trauma, tragedy, threats, and stress in the family, relationship, health, work, and finance [15]. For example, ACs minimise the stress related to unemployment [16], children's education [17], and access to credits [18]. ACs also enhance employees' job satisfaction as members manage themselves [19]. As such, working in groups improve members' pride and joy [20]. These pieces of evidence collectively show the roles of ACs in improving people's psychological wellbeing—one of the GNH domains.

#### **2.1.2 Health**

ACs can improve members' physical and mental health, thereby, addressing the health dimension of GNH. ACs serve as a health insurance for its members. For instance, when a member is sick or injured, other members render financial and psychological support [18]. Frequent interactions among members of ACs also reduce their mental stress [12,15]. One plausible argument was that members discuss solutions to their problems like a family. This keen sense of belonging among the members of ACs has a positive influence on their health [21]. As members own and operate ACs, one can expect health policies, including nature of work, safety, injury, and illness that are favourable to them. Besides, ACs create awareness on health issues during gathering among the members or with non-members in the community. ACs also improve the public health by enhancing food security [22], creating employment opportunities [23], and boosting household income [24]. Studies show potentials of ACs to improve health. ACs have their role in optimising GNH as health determines the happiness of people [25].

#### **2.1.3 Time use**

Cooperatives can have flexible working hours, for meeting family, education, leisure, and social commitments [26]. As ACs are autonomous organisations owned and managed by members, they can have time use policies convenient to the members. Additionally, ACs enhance productive time use through employment opportunities to both members and non-members [27]. Gathering of members to perform cooperative activities allows the best use of their time in building rapport, sharing problems, and building trust [28]. A study in Nigeria reported that livestock farmers prior to joining a cooperative had to wake up early, feed the livestock, look after the herd during the day, escort them home, and had to protect from wild predators at night. The compact work schedule left farmers with less time for family, social commitments, and sleep [29]. ACs can solve problems concerning work-life balance by creating enabling conditions. For instance, cooperative members can take turns or perform a specially assigned task to finish faster and use free time for other purposes [30]. Such collective actions not only reduce individual workload but also improve quality time use through interaction and rapport building [31]. Thus, quality time use in ACs enhances people's work-life balance. As a result, ACs contribute to workers' happiness.

#### **2.1.4 Education**

One of the cooperative principles is "Education, training, and information" [32]. Therefore, cooperatives educate their leaders, members, and other staff. Different sets of knowledge and skills are essential for the success of cooperatives [33]. However, Bhutanese farmers are mostly illiterate, lacking exposure to modern farming and technologies. Yet, ACs enable them to access professional services, including training and awareness programs better than non-members [34]. ACs also allow the exchange of their knowledge and skills through regular contact among members. Farmers' tour is another program in ACs that educates members [35]. Farmers' tour can take two forms: (1) cooperative members visit other successful farmers and (2) other farmers visit the ACs. Additionally, Bello [17] reported an evidence where a cooperative started a school for the members' children. Similarly, other cooperatives can replicate such a model to educate themselves. Given that there are more illiterate farmers in rural Bhutan, ACs can organise non-

formal education program to educate their members and other aspiring farmers in the community. Thus, ACs have the potential to educate both members and non-members in the community. ACs educating members can improve other spheres of their life necessary for happiness.

### **2.1.5 Standard of living**

ACs improve people's standard of living, therefore, different countries promote cooperatives as the vehicle for a nation's development [36]. Cooperatives generate employment opportunities in the community, enabling people to earn decent incomes [23]. The pooling of resources among members reduces transaction cost [37] and improves their bargaining power in the market [24]. As a result, members of ACs earn higher income compared to non-members [38]. In a country like Bhutan where people experience seasonal food insecurity [39], farmers use added income earned from ACs to buy food. Similarly, Zeweld et al. [22] showed a positive impact of ACs on food security in Ethiopia. Members of ACs also enjoy better access to assets, information, services, and markets than non-members [40]. Consequently, ACs reduce poverty and improve people's standard of living [41]. ACs improving the countrymen's standard of living indicates their role in optimising GNH.

## **2.2 Organisational Condition for Happiness**

### **2.2.1 Good Governance**

The cooperative values and principles together with other country-specific laws [42] facilitate good governance within the cooperatives. Despite the lack of a universally accepted definition of cooperatives [43], cooperatives have common values such as self-help, self-responsibilities, democracy, equity, and solidarity that guide the cooperatives. Cooperatives practice these values through seven principles: (1) voluntary and open membership, (2) democratic member control, (3) member economic participation, (4) autonomy and independence, (5) education, training, and information, (6) cooperation among cooperatives, and (7) concern for community [32]. ACs also serve as members' training ground for good governance. For example, ACs practice democratic election of their leaders. They also

re-elect their leaders every after a certain number of years providing leadership experiences to members. Leadership experience refers to the time in service, diversity, richness, or relevance of earlier jobs [44]. We expect individuals shouldering leadership responsibilities to learn specific skills, knowledge, and behaviours necessary for governing groups and organisations. These members with leadership experiences take part in local government and other leadership positions. Likewise, ACs help in the capacity development of local leaders [45]. Moreover, education and training programs such as leadership, office management, and record keeping also enhance their governing skills. ACs also make policy recommendations for the benefit of wider communities [46]. As discussed above, ACs guided by the principles optimise GNH by promoting good governance both at the local as well as national level.

### **2.2.2 Cultural diversity and resilience**

Members of ACs comprised of diverse ethnicity, language, nationality, religion, and gender [15]. The interaction of members with different culture during training and other cooperatives' activities promote cultural diversity in the community [43]. Therefore, ACs have played significant roles in the preservation and promotion of culture despite modernisation threatening the survival of Bhutanese culture [47]. For example, ACs in Zhemgang district of Bhutan produce *Bangchung*— a traditional dome-shaped bamboo container fashioned out of bamboo fibres. Similarly, there are other ACs dealing with conventional local products preserving and promoting culture. Such community organisations can develop traditional knowledge through trial and error. Further ACs preserve and pass traditional knowledge to the future generations [48]. The traditional practice of volunteerism such as labour contribution, cash, and kind— during sickness, death, constructions, festivals, etc., were found better among members compared to non-members [49,50]. Zeuli and Cropp [43] also asserted better social capitals, including community relationship and cultural participation among the beneficiaries of cooperatives. These social capitals through cultural participation are more stable and help to develop strong bonding across differences in the communities [15]. The cultural diversities among members of ACs strengthen the social relationship [51], which is vital for optimising GNH.

### **2.2.3 Community vitality**

Social support, family relationship, community relationship, and community security are the important indicators of community vitality [50]. ACs share resources, access to markets, and protect discrimination in the market [52]. Unlike wage labours, where the relationship ends upon payment being made, labour exchange system among members of ACs is one of the examples of community vitality. Members of such groups receive better supports of money and time in the community [53]. Members also get better access to government officials, non-government organisations, and other stakeholders [54]. An interactive environment necessitated by interdependence at all levels of cooperatives foster the sense of belonging among people [31]. The community-based engagement of people through cooperative implies peaceful society based on the principles of interdependence, reciprocity, mutual benefit, and peaceful coexistence [55]. "Concern for the community" as one of the cooperative principles [32], members often engage in voluntary activities, thereby, contributing to improving people's well-being [56]. The vibrancy and vitality of community life are indispensable in optimising GNH [31].

### **2.2.4 Ecological diversity and resilience**

ACs have a wide range of activities, including water and soil resources management, agro-tourism, and production of quality local organic food [20]. Thus, ACs harmonise the human-environment interactions by adopting the Triple Bottom Line that considers people, planet, and profit [57]. ACs also enable people to find innovative solutions to environmental changes by allowing them to diversify their economic activities and embrace more green ventures [46]. Downing et al. [58] highlighted the emerging importance of ACs in the production of renewable energy and enabling the world societies to move forward in the global quest to curtail the carbon emission and use of fossil fuels. According to Renting and Van Der Ploeg [46] and Van der Ploeg [59], ACs benefit human-environment interactions in two ways: (1) natural track and (2) environmental track. The natural track benefit includes activities regarding management of ecological and landscape values in the members' farms. The environmental track benefit includes the reduction of environmental pollution on member farms through increased use of internal farm resources and curtailing the use of external resources. In socio-political

respects, ACs facilitate environmental policy formulation, endorsement, and achievement of the policy goals through diligent implementation of these policies in their activities and localities [46]. These studies show ACs can address GNH's domain of ecological diversity and resilience.

## **3. CONCLUSION**

We reviewed the role of ACs in optimising GNH using the "proposed GNH of Business"—a framework developed by Centre for Bhutan studies and GNH. Earlier studies show that ACs have a potential to optimise GNH by improving workers' happiness and organisational conditions for happiness, given the ACs are functional or successful. Unlike other profit-driven business models such as state-owned enterprises, ACs exhibited not only economic benefits, but also the environment, socio-culture, and good governance. Therefore, strengthening the existing ACs and establishing new ACs can help in optimising GNH. This review based on earlier studies, show positive impacts of ACs on GNH, but there is a need for empirical studies to confirm the discussions. This study could inspire future scholars of related fields to empirically study ACs through the lens of GNH.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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