

EdCW 2020**International Scientific and Practical Conference Education in a Changing World: Global Challenges and National Priorities****LEADERSHIP SKILLS IMPACT ON LEADER'S PERFORMANCE:
A CASE OF MONGOLIAN AGRICULTURAL INDUSTRY**

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Abstract

Leaders' work performance depends on their leadership skills such as problem solving, strategic planning, teamwork and also leading organization, leading others, and leading oneself. This study identified the relationship between leadership skills and work performance of leaders in rural areas of Mongolia. It is the first research effort in Mongolia to develop an evaluation methodology for assessing the leadership of rural territories and the leadership skills and to compare how rural development depends on leadership skills of people involved in the leadership activities. In addition, this study will help to develop the method of assessing the leadership skills and abilities of managers and administrators of rural territories. The rural managers' leadership skills play a significant role in solving the problems of sustainable development of the rural areas in a proper way and inefficient implementation of the action plan and policy of the Mongolian Government in rural areas. A rural area needs to be developed in parallel with the country's development. The results of the research presented show that communication, developing and change management skills influence work performance in a direct and positive way. In the agriculture industry, regular professional development and retraining for improving leadership skills will help to enhance the understanding of leadership aspects among the managers.

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1. Introduction

In the 21st century, education of a manager, who works in the rural areas, is one of the main factors which is the most important to influence the development of the rural area. Therefore, the rural governors have a necessity to improve or develop their managers' knowledge and skills to the new level of the development in the rural area. It has been considered that having leaders who can innovate and introduce a new technology in agricultural production is the most important for effective and sustainable development of agricultural production. Introducing innovations and technologies in agricultural production will begin with developing human resources and leadership skills. Therefore, there is a need to increase training and programs aimed at improving personal development skills in the education system in Agriculture. According to the experience in some countries such as Canada and Australia, they implement Leadership skills programs in which the attendees always appreciate the program and they work effectively (Eric & Hannah, 2005). In order to prepare the future leaders, the universities should take into consideration not only to develop their students' leadership skills but also to implement a special program in the way of conducting a formal or informal post graduate training to develop their leadership skill. The aim of this study is to determine current local governors' leadership skill and identify the demand and necessity of education in the future.

2. Problem Statement

The objectives of this study are as following:

2.1. Defining the necessity of developing leader's programs in rural areas

The agriculture sector is the second after mining main contributor to the Mongolian economy, accounting for 12% of GDP (The Year Book, NSO, 2016), and it directly or indirectly provides an estimated 28% of total employment (World Bank. The Annual Report, 2015). The livestock sector accounts for 87% of agricultural production, while the remaining 13% is sourced from crops, mostly wheat (Special Report FAO/WFP Crop and livestock assessment mission to Mongolia, 2017). Therefore, the agriculture sector is an economically important sector for Mongolia. Human resource development is critical to the sustainable development of the agricultural sector. In particular, improving the leadership skills of agricultural professionals has been shown to have a positive effect on productivity and performance. Leaders who develop their leadership skills have been considered essential for success in the complex and rapidly changing and developing the agricultural sector, especially industry (Chernova et al., 2019). Thus, agricultural leadership policies and programs are being implemented in many countries around the world. For instance, the United States has a 70-year history program (Kathleen & Leah, 2003). We have experience to implement and conduct leadership training and programs with few numbers for agriculture industry managers in Mongolia but they are insufficient. Therefore, there is a necessity to be identified for developing leadership skills for local government and managers.

2.2. Identifying the current level of leadership skills of rural managers' workplace

In recent years, the lack of focus on developing the knowledge and skills of rural managers and the professions has led to a decline of rural development and an increase of the rural to urban migration for education and a staff shortage in rural areas. As of 2019, 77% of the Citizens' Representative Khural of province have higher education which is not enough, the number of the people who participated in specialized leadership training is low (Analysis of the implementation of the law on administrative and territorial units and their management in Mongolia, 2019).

68.5% of the total population of Mongolia lives in Ulaanbaatar, the capital city, and the number of students and high school students are studying in the capital city, is increasing year by year. In accordance with our survey, rural managers' leadership skills play an important role for improving the quality of life for rural citizens. Moreover, the managers' individual leadership skills can contribute to rural development. The skills, which they should have, such as making decisions, working together as team-work, organizing, being open-minded, respecting and understanding each other are very important. Therefore, this study will contribute to identify the leadership skills of rural managers and professionals and the skills they need or lack and then develop a leadership training program for the university.

3. Research Questions

The study seeks to answer the following questions on the leader's leadership skills by Mongolian rural agriculture industry:

- Is there a necessity for a leadership program to be implemented in the rural areas? Do the managers have to attend leadership training?
- Which leadership skills are more important?
- Which leadership skills does leaders' performance influence?

4. Purpose of the Study

The purpose of this study was to identify the rural leader's skills adopted by the rural agriculture managers of industry, determine the relationship between individual leadership and their performance. We formulated the following hypothesis for the study:

Hypothesis (H1): Leadership skills have a positive effect on a leader's performance.

5. Research Methods

Based on the research, praxeology and infology, the following research methods have been used:

1) The leadership gap analysis is to determine the alumni and managers' leadership skills of our university who work for the Agricultural industry.

2) We used structural equation modelling that identified the influence of the managers' leadership skills in their work performance.

A leadership gap indicator is a method for assessing managers' view about the necessity of developing leadership of the agricultural industry. A leadership gap indicator is a tool for assessing managers' view about their leadership development needs. Also, Structural equation modeling is a statistical modeling technique in the behavioral sciences. The meaning of this analysis approach is to evaluate the leadership skills selected to achieve a goal and to give an opportunity to maintain the skill for developing further. The ability of the managers' leadership was evaluated by three qualifications such as leading organization, leading others and leading management.

Managers who work in the Agriculture management department located in 21 provinces of Mongolia participated in our survey works. A total of 260 respondents of the Agricultural managers and officials in the relevant government agencies completed the community survey. In accordance with the research format prepared based on the theory, a total 20 items rated on a five-point Likert scale (1 = "strongly disagree" to 5 = "strongly agree"). Survey data were analyzed using Smart PLS and SPSS programs. Smart PLS software was used to confirm the measure of measurement and structural models. In this survey, respondents were male 57.0% and female 43.1%. The respondents consisted of leaders 28.1% (director and CEO), senior managers 11.5%, and managers 60.4%. 15.8% of respondents have 1 to 5 year - experience, 13.1% of respondents have 6 to 10-year experience, 12.3% of respondents have 11 to 15 year experience, 9.6% of respondents have 16 to 20-year experience and 49.2% of respondents have up to 20-years' experience.

In accordance with respondents, 20.4% of participants did not attend any leadership training and programs, 52.3% of the participants were provided with leadership training and programs only once, 26% 2-3 times and only 2.3% of more than 3 times. This shows that training and programs are not sufficient for managers and leaders in rural areas.

6. Findings

Leadership is a very important issue in both the agricultural industry and agricultural education (Easterly et al., 2017). Also, it requires an enlarging attempt in higher education to stay attuned to the agricultural industry's leadership is essential through the development of new leadership training programs in the University of Agriculture around the country (Alexander et al., 2017). Researchers emphasized that employers or human resource managers who hire for agriculture-related careers desire to hire college and university graduates who possess effective leadership skills (Smalley et al., 2016). In Mongolia, Agricultural professions have to be leaders due to the fact they are food suppliers in their own country. In other words, Agricultural leaders are able to improve the quality of life for rural citizens. Therefore, rural leaders should realize that they have to focus on their own general leadership skills which are team work, communication, making decisions, time management and creating strong organization. Researchers defined leadership skills as leadership, teamwork, decision-making, problem solving,

reasoning and communication as well as personal qualities such as trust and responsibility, built through authenticity, integrity, transparency and respect (Cismas et al., 2016; Remenova & Jankelova, 2019). The many scholars suggested that leaders must have other leadership skills are organization and delegation, sharing leadership, communication, creative thinking, decision-making, time management, divergent thinking, conflict resolution, goals setting and group dynamics. That is the reason we will define the level of leadership skills as well as how they are affected in performance in the agricultural industry. Participants for this survey consisted of three groups: Leaders, senior managers and managers who were asked to identify their individual leadership skills (Table 01).

Table 1. Ranked leadership skill assessment by the group

Skills	Leader (n=73)			Senior manager (n=30)			Manager (n=150)		
	Rank	Mean	SD	Rank	Mean	SD	Rank	Mean	SD
Building collaborative relationship	1	3.89	0.980	4	4.35	.697	1	4.67	.479
Confronting problem employees	2	3.86	0.918	12	4.29	.727	15	4.40	.724
Culturally adaptable	3	3.82	0.945	1	4.27	.756	3	4.40	.498
Self-awareness	4	3.79	0.942	3	4.27	.676	5	4.33	.606
Respect for difference	5	3.78	0.901	2	4.26	.769	7	4.33	.606
Compassion & sensitivity	6	3.77	0.921	7	4.24	.818	13	4.33	.884
Being a quick learner	7	3.75	0.863	14	4.24	.622	12	4.30	.466
Putting people at ease	8	3.73	0.976	8	4.23	.688	2	4.30	.466
Employee development	9	3.70	0.972	10	4.08	.725	10	4.30	.702
Work-life balance	10	3.67	0.912	6	4.06	.872	6	4.27	.583
Composure	11	3.67	0.944	5	4.04	.733	4	4.27	.450
Taking initiative	12	3.62	0.907	15	4.03	.788	8	4.23	.568
Change management	13	3.60	0.939	13	4.03	.688	10	4.23	.568
Decisiveness	14	3.55	0.867	9	4.01	.759	9	4.23	.430
Leading employees	15	3.55	0.987	11	3.92	.781	14	4.20	.664
Career management	16	3.37	0.964	17	3.87	.661	17	4.07	.691
Strategic planning	17	3.26	0.882	16	3.68	.924	16	3.87	1.00

Note: SD: Standard deviation

Researchers suggested that in the agriculture industry, working managers have been three types of the skills which is leading the organization (4), leading others (7), and leading oneself (6). This survey showed that leading organizations, leading others and leading oneself differ in three groups. We used 17 skills by the leadership gap indicator. Results of the survey, leaders assessed their own skills are good such as building collaboration, problem-solving, adaptability and self-awareness whereas the senior managers and managers assessed that adaptability, respect for diversity and self-awareness skills are possessed more. The main leadership skills are quick learning, change management, decision making and strategic planning for leaders (Barret et al., 2005; Zabriskie & Huellmantel, 1991). Besides, managers evaluate themselves skills that they implement building collaboration, putting people at ease and adaptability skills more. Therefore, we discovered that senior managers and managers have lower skills of career management, taking initiative, quick learning and decision making. From this survey, they agreed that they will have a necessity of training and programs to develop the skills.

In the study, Smart PLS version 3.0 was used to analyze the data. The minimum metrological requirements are Average Variance Extracted (AVE) 0.50 and Composite Reliability (CR) 0.70. Table 2 below shows that loadings > 0.7; Cronbach's alpha >0.70; CR >0.70 and AVE>0.50, thus the measures have sufficient convergent validity. In our study, composite reliability value ranged from 0.88 to 0.94 which showed the construct indicators the latent construct, which exceeded 0.7 values suggested by (Hair et al., 2010) (Table 02).

Table 2. Result of Measurement Model

Construct	Item	Cranach's Alpha	CR	(AVE)
Communication skills	cps1	0.927	0.945	0.773
	cps2			
	cps3			
	cps4			
	cps5			
Decision making skills	dm1	0.800	0.882	0.715
	dm2			
	dm3			
Developing Change management skills	rs1	0.886	0.929	0.814
	rs2			
	rs3			
Implementation and improving skills	lm1	0.869	0.92	0.794
	lm2			
	lm3			
Leader performance	pl1	0.931	0.948	0.785
	pl2			
	pl3			
	pl4			
	pl5			
Strategic & creative thinking skills	sct1	0.888	0.923	0.751
	sct2			
	sct3			
	sct4			
Collaboration skills	col1	0.893	0.933	0.823
	col2			
	col3			

The results in structural and model are presented in Figure 01. The relationship between communication skills and leader performance is positive that the $\beta=0.537$ t-value =6.23 and p-value <0.000. Also the relationship between developing and change management skills leader performance is positive $\beta=0.256$ t-value =3.292, and p-value <0.001. The R2 value 0.78 which suggests that selected leadership skills explain 78 percent variance in it.

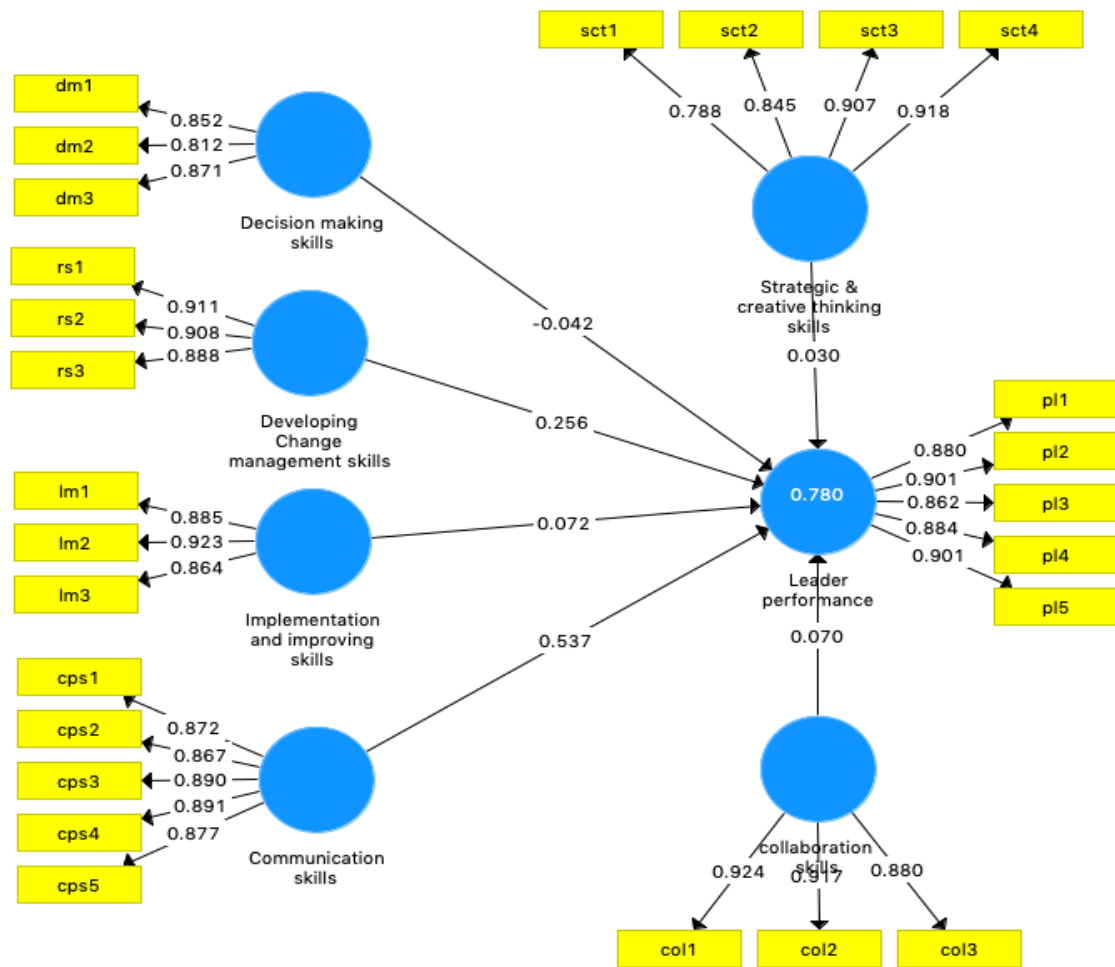


Figure 1. Results of the Structural Model Analysis

7. Conclusion

This study identified current leadership skills of managers and professionals of the agricultural industry and revealed the needed leadership skills for them. As a result of the study we draw the following conclusions:

- Respondents rated their skills to lead others and themselves as good, but their leading organization skills are not sufficient. Respondents showed that key skills of leaders which are the quick learner ability, adaptability, and planning strategy are ranked lower 10, 13, 16, 17 out of 17 skills. This indicates that professionals have not well mastered these skills, which are the most important ones to lead an organization and others.
- The managers evaluated themselves that their collaboration skills are highest but problem-solving, career and strategic planning skills are the lowest of the selected 17 skills. This shows that managers are more learning leadership skills. It showed that respondents haven't possessed the skills well enough.

- We hypothesized that six factors used to connect the structural model measures out of which two factors supported the hypothesis that communication and developing and change management skills are a direct positive influence on work performance.
- In the agriculture industry, regular refresher training to improve skills of leadership will help to enhance the understanding regarding leadership aspects among the managers.

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