



## Performance Analysis of Basic Agricultural Producer Organizations (BAPOs) in Sudan

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### Abstract

The purpose of this study is to evaluate the performance of Basic Producer Agricultural organizations (BAPOs) in Sudan. To achieve this objective, one organization per state (14 States) was selected to analyze its performance. A cross social survey approach was carried out. Each Basic Agricultural Producers' Organization comprises 3 board leaders (Head of the Organization, Secretary-General, Finance officer) and at least 12 members. The primary data was collected through a questionnaire. The questionnaire covered 7 performance indicators which are (Relevance, Efficiency, Financial Viability, Motivation, Human Resources, Governance, and External Environment). For data analysis, the Excel and SPSS applications were used to calculate each performance indicator's percentages and strengths and weaknesses. The most important results were a decrease in the human resources axis, and weakness in the external environment and the motivation, which have significance to the decline in organizations' efficiency and poor performance. The most important recommendation is to implement emergency training programs to improve knowledge and skills in management, and motivation and enhance the external environment of organizations to increase the performance efficiency of basic producer organizations in Sudan.

**Keywords:** Farmers Groups, Group Action by Farmers in Sudan, BAPOs, and Performance dimensions.

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### Introduction

Sudan has a long tradition of collective action. Indigenous forms of cooperation have a longstanding history and can be found in both rural and urban areas. They are based on communal and mutual participation. The most known forms of

collective action practiced in many parts of Sudan are **Nafeer**: It's the Arabic name used to describe the act of calling on the community for help with work. It has different names among different ethnic groups in Sudan. It's mainly adopted for mutual help in the rural areas for instance

during cultivation seasons, building houses, or similar practices. Faza'a: This practice is largely experienced during catastrophes and emergencies like fires and floods, whereby volunteers respond to provide help and assistance. Khatta and Sunduk: They are the traditional tools and means of savings, which prevail in the urban and rural areas. Here saving and credit groups use a rotating queue to give the collected equal amount to each member by turn. Judia: it is the traditional legal system for conflict and peace management, largely practiced in rural areas. This dense traditional social fabric has always been favorable to the spread of voluntary and cooperative practices in the country, and also for more formal organizations, such as cooperatives, which date back to the beginning of the second century, and the more recently established producer organizations (Yousif, 2018) and (POC, 2014 – 2019). National governments and donors have promoted and supported the development of farmers' institutions in sub-Saharan Africa for decades, some have supported them for practical purposes, while others have done so for strategic reasons. Cooperatives, saving and credit societies, commodity farmer associations, and other forms of farmer-based organizations have been promoted as an element of strategy for agricultural modernization and structural transformation of national economies, along with the planned economy in some cases, the free-market economy in others. Civil society is a realm of social life – market exchanges, charitable groups, clubs and voluntary associations, independent churches, and publishing houses – institutionally separated from territorial state institutions (Repucci, 2010). In addition, such organizations and other civil society organizations have been promoted as a key mechanism for empowerment, particularly by those who viewed poverty and associated disadvantages as the consequence of 'powerlessness' in political,

economic, and social spheres (Rwelamira, 2015). All these types of social organizations in the rural sector are based on several policy rationalizations (Fredericks et al, 1980). Rocchigiani, (2017) Stated that, these organizations in general and the newly formed organizations in Sudan, in particular, had a lack of technical support in terms of technical and commercial services such as capacity building, training, research, studies, and collection of information. Poor contribution of the organizations in sustainable rural development, food security, and poverty reduction. Lack of market outlet and export facilities for agricultural and animal production. Poor access to agro-processing facilities. Fragmentation of the agricultural land holdings Poor infrastructure such as roads, water points, and agricultural support services. Poor market access and technical awareness.

The benefits of farmer groups regarding the production of food are important since the motivation for participating in agriculture is first and foremost to contribute to household food security. The members of the farmer group benefit from support from each other, with experienced farmers becoming discussion partners for those less experienced, and: members learn from each other. Farmer groups, whether at the grassroots, district, or national level have the major function of representing the interests and collective views of their members to government. The benefits of farmer groups include making agricultural extension services more client-driven and efficient and strengthening farmers' bargaining power with traders. Yousif, (2018) and POC (2014 – 2019) reports that according to the POs law in Sudan, there can be different types of POs as illustrated hereafter: (1) Basic Producer Organizations (BPOs) are entrusted to provide technical, commercial, and modern productive services dealing with inputs, marketing, and agro-processing. A minim-

um number of seven producers is required to establish a BPO. (2) In Specific organizations for marketing and transformation, management, and common production issues, a minimum number of eleven BPOs is required to establish a specific organization. (3) Specialized organizations that are aimed to provide management and administration on marketing, processing, and other common agricultural-related issues, a minimum number of five specific organizations are required to establish a specialized organization at the local level. (4) Producer's organizations at the state level that are aimed to provide management and administration on marketing, processing, and other common agricultural-related issues with a minimum membership of three specialized organizations. (5) General Producer's Organizations (commodity-based), established for each product with a minimum membership of one hundred and fourteen specific or specialized organizations in four states. (6) Producers' organizations at the national level with a minimum of twenty-one specialized organizations. (7) Producer's organizations for water use. Therefore, the philosophy of this study depends on a model prepared by the Food and Agriculture Organization to study the performance of organizations that depend on serving their members. As the concept of performance is commonly associated with the idea of achievement and success. Organizational performance has three main dimensions:

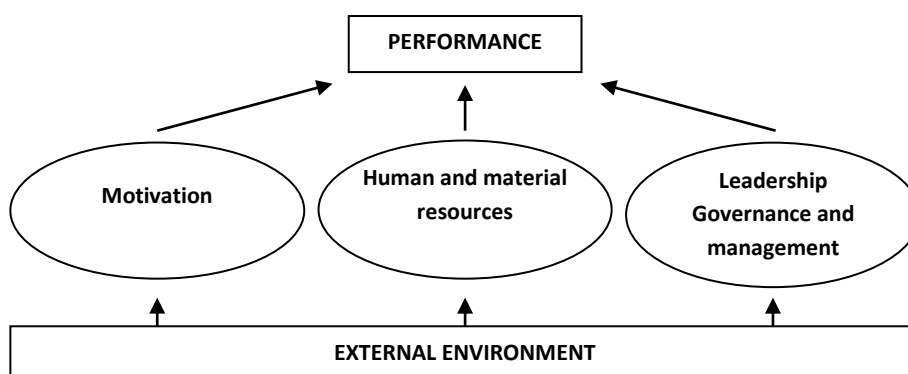
**Relevance:** that is, the ability to set and pursue a purpose that meets the real needs and aspirations of its members while continuing to contribute to the improvement of their living conditions (and therefore able to adapt to change) (Rocchigiani, Herbel, 2013). And being adaptable at work through responding quickly to the evolving ideas, responsibilities, expectations, trends, strategies, and other processes, and

possessing soft skills like interpersonal, communication, creative thinking, and problem. And also means the ability to be flexible and adjust to changing factors, conditions, or environments. Being adaptable is highly valued in almost all workplaces since every industry and business can be unpredictable. (Indeed Editorial Team, 2021).

**Effectiveness:** It's the power to produce the desired result. In an organizational context, however, effectiveness is harder to define. The effectiveness of an organization depends on its mission & goals, internal efficiency, strategic positioning, and many more factors. (Vulpen, 2022). The degree to which an organization is fulfilling its mission, and remains true to its purpose and its objectives. (Rocchigiani, Herbel, 2013). **Financial viability:** that is, to be able to find the funds (and generate revenue) for its operations in the short, medium, and long term. In summary, an organization is relevant as its mission, objectives, and services to members correspond to real needs. It is effective when it can perform well. Finally, to be sustainable over the long term, it needs to be financially viable. But there are Factors influencing organizational performance, which also its Share capital or equity means the total of the payments made to the company/society by all the shareholder Members (farmer producers/ institutions of farmer producers) on their shares. It represents a form of member commitment to the group and it defines each member's stake in the group (NABARD, 2015). Therefore, many challenges would be associated with the financial participation of farmers; financial participation is desirable because it empowers farmers, who turn from beneficiaries to customers or owners. Moreover, it is the most helpful lever for ensuring effective services and accountability of extension workers and researchers to users. The involvement of

farmers in funding is also presented as a strategy for giving local stakeholders a sense of responsibility and for ensuring

sustainability. (Moumouni and Streiffeler, 2010)



**Motivation:** Can be defined as incitement or inducement to fulfill an action. Motivation can drive individuals of the group to meet their individual goals as well as the organization's overall goals. A motive initiates an action or certain behavior for the fulfillment of a specific goal, and this directly corresponds to the desire of an individual (LSBF, 2020). Motivation is what makes the organization act and invest in itself to ensure it can grow and increase its productivity. It includes the goals and values of the organization, attitudes to change, and the system of incentives. Organizational motivation is determined by its history, mission, and culture. Motivation can refer to: Members identify with the values of the organization. The objectives of the organization are regularly defined/renewed to respond to changes in local and global situations/plans. Members actively participate in the life of the organization. Members fully commit to their organization because they identify with its concerns and interests.

**Governance and management:** include the internal rules and procedures (including the formation of management structures and the way they function), the decision-making processes linked to access to services, distribution of benefits,

communication flows, and internal and external relations, as well as performance evaluation processes. The principles of good governance are participation, consensus building, equity, accountability, respect for rules, transparency and information, as well as equality between women and men These principles should be the basis for management of the organization and should guide its processes for decision-making, implementation of decisions, management of financial and material resources as well as the provision of services and the distribution of benefits. Also, governance is the process of providing strategic leadership to an organization and involves setting direction, making policy and strategy decisions, overseeing and monitoring organizational performance, and ensuring overall accountability. Good governance can help ensure the health, vitality, longevity, and sustainability of an organization and its members. We need Governance to support organizations' strategic and policy frameworks that to ensure organizations' financial viability and ensure that organizations comply with all legislative, statutory, and contractual duties and obligations (BCAFM, 2016).

**Human and material resources in the organization:** every organization has at its

disposal human, material, and financial resources that enable it to carry out its activities in a successful manner to reach its stated goals and objectives. Financial resources and their management have been organization: planning and allocation of human resources, rewards of human capital, and skills development. Skills development includes the technical capacities (e.g. agricultural, marketing) and functional capacities (e.g. administrative and financial management, planning, advocacy, negotiation, leadership, equity, and good governance) of cooperative leaders and members. Skills may relate to knowledge, know-how, or particular competencies. Shortages of one or other of these skills can appear in the various bodies of the organization (general assembly, board of directors, executive board, supervisory body, committee/marketing boards, or other types of boards, management) and negatively affect its performance. Concerning material resources, this term mainly refers to the management of infrastructure and technology.

**External environment:** this can be defined as the sum of the conditions that are external to the organization and that determine its establishment and its

addressed in the component on performance relating to financial viability. As regards human resources and their management, the following aspects may have an impact on the performance of the development as well as its capacity to carry out its role in society. It includes the policy and legal frameworks, consultation mechanisms between the organization and policy-makers, economic incentives, and information and communication. This study aims to assess the performance of basic Agricultural producer organizations in Sudan. (Rwelamira, 2015) and (Rocchigiani, Herbel, 2013).

**Methodology Sampling View:**

The study covered 14 states of Sudan, with a Basic Agricultural Producer Organizations for each state selected randomly, 127 members and 42 board leaders of (BAPO) were interviewed, and the key criteria for PO selection were:

- Geographic representation (one BAPO for each state).
- Sectoral representation (crop and livestock products).
- Grass root-level organizations.
- A minimum lifetime of three years.
- Active membership. - Gender sensitivity.

**Table (1) the sample size and States represent:**

State	Board	Member	Total
River Nile	3	10	13
Khartoum	3	7	10
North Kordofan	3	10	13
North Darfur	3	10	13
East Darfur	3	10	13
White Nile	3	10	13
Kassala	3	5	8
Aljazeera	3	10	13
Northern	3	10	13
South Kordofan	3	10	13
West Darfur	3	10	13
West Kordofan	3	10	13
Sinnar	3	5	8
Gadarif	3	10	13
<b>Total</b>	<b>42</b>	<b>127</b>	<b>169</b>

**Research Tools:**

The questionnaire was covered the seven parameters: "Efficiency, Relevance, Financial viability, motivation, Human and material resources, Governance and External Environment". These parameters have a direct impact on the activities of the POs respondents were asked to define their point of view according to the response sequence "very good, good, weak, very weak, and absent" To facilitate statistical analysis those options were coded "4, 3, 2, 1, 0" Respectively, an Excel tool has been prepared for analysis to extract the percentages and graphs, as well as the strengths and weaknesses of each performance indicator.

The value of the average calculation is interpreted after calculation based on the number of options and categories in the scale, the range is calculated, which is equal to  $(5-1 = 4)$  to be calculated the length of the category by dividing the range by the number of categories (options), so  $(4/5 = 0.8)$  the first category of the average calculation values is: From 0 to  $1 + 0.8$ , and so for the rest of the averages values, the following table, which shows the method of interpreting the averages values and determining the degree of the direction of the sample, is a table (2).

**Table no. (2) sample direction determination grades (cutting area):**

Direction	Very Good	Good	Weak	Weak Very	Absent
Weighted Average	3.7 - 4	2.8 – 3.6	1.9 – 2.7	1 –1.8	0.9 - 0

**RESULTS AND DISCUSSION**

**Table (3) shows the items on the Relevance axis:**

Items	Board		Members		Items	Board		Members		GM
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. The mission and vision of the BAPO are owned by all members.	3.7	0.11	3.8	0.05	6. The programs are reviewed and regularly revised with the active participation of the members.	3.1	0.14	3.0	0.08	3.3
2. The mission promotes shared values, including general equality.	3.5	0.13	3.5	0.07	7. The needs and perceptions of women and youth are taken into consideration adequately.	3.3	0.10	3.2	0.07	
3. The members are adequately surveyed to obtain their perception of the BAPO.	3.5	0.11	3.5	0.06	8. The BAPO executive committee members are aware of the objectives as stated in the by-laws.	3.8	0.06	3.7	0.05	
4. The PO activates to respond to members' needs.	3.5	0.11	3.4	0.07	9. The BAPO provides services to members regularly.	2.8	0.20	2.9	0.10	
5. The mission of the BAPOs is reflected in the objectives and activities implemented by the organization.	3.4	0.14	3.2	0.08	10. Monitoring and evaluation are valued at all levels of the organization as a way to improve performance.	3.1	0.13	3.0	0.10	

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

**Table (4) shows the items on the Efficiency axis:**

Items	Effectiveness				Items	Effectiveness				GM
	Board Mean	Board SE	Members Mean	Members SE		Board Mean	Board SE	Members Mean	Members SE	
1. The BAPO is effective in the fulfillment of its mission.	3.1	0.15	3.1	0.08	6. The BAPO provides effective information and internal and external training for its members according to their needs. In collaboration with the concerned and supporting institutions.	<u>2.7</u>	0.16	<u>2.5</u>	0.11	2.8
2. The BAPO uses effectively its human, financial and physical resources.	3.2	0.15	2.9	0.10	7. The BAPO provides effective input supply to its members according to their needs.	2.8	0.17	<u>2.7</u>	0.10	
3. The annual action plan includes performance indicators.	3.0	0.18	3.0	0.10	8. The BAPO provides effectively extension services for its members according to their needs.	3.3	0.14	3.1	0.09	
4. Members can rely on the services provided by the BAPO compared to other service providers	3.1	0.16	2.9	0.09	9. The BAPO provides effective marketing services to its members according to their needs.	<u>2.7</u>	0.16	<u>2.3</u>	0.11	
5. The BAPO negotiates and advocates effectively with other stakeholders on behalf of its members.	3.2	0.18	3.1	0.10	10. The BAPO provides effectively services related to environmental protection (e.g. adequate storage of crops, reducing the use of chemicals...) to its members.	<u>2.0</u>	0.21	<u>1.9</u>	0.12	

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)



Table (5) shows the items on the Financial Viability axis:

Financial viability										GM
Items	Board		Members		Items	Board		Members		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. Monthly meetings of the Board are attended by the majority of the members.	3.4	0.13	3.4	0.09	6. The staff is sufficiently qualified in the execution of their task.	<u>2.5</u>	0.22	<u>2.5</u>	0.13	2.9
2. Staff roles and responsibilities within the organization are clearly defined.	3.2	0.18	3.2	0.12	7. Written regulations exist to support the administrative and financial procedures of our BAPO.	2.9	0.16	2.9	0.09	
3. There is an updated training plan for the staff.	2.9	0.19	<u>2.6</u>	0.11	8. The physical infrastructure (e.g. storage, Computers, telephones...) is adequate to support performance.	<u>2.0</u>	0.24	<u>2.2</u>	0.14	
4. The Organization has appropriate job descriptions and competency reviews.	3.3	0.18	3.2	0.11	9. The General Assembly meetings meet the majority from the first round.	3.4	0.12	3.4	0.08	
5. The staff is regularly assessed by the Board in fulfilling their task.	3.0	0.14	3.1	0.09	10. Facilities of BAPO are maintained in good condition and frequently checked.	<u>2.7</u>	0.23	<u>2.5</u>	0.14	

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

Table (6) shows the items of the Motivation axis:

Motivation										GM
Items	Board		Members		Items	Board		Members		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. There is a clear vision and mission that reflects member needs and aspirations.	3.4	0.11	3.4	0.07	5. The BAPO encourages communication and experience sharing among staff, members, and elected officials to carry out their problem analysis.	<u>2.6</u>	0.23	<u>2.4</u>	0.15	<u>2.7</u>
2. the vision and mission support the solidarity among the members of the organization.	3.4	0.11	3.4	0.08	6. The BAPO encourages learning from failures.	<u>2.1</u>	0.26	<u>2.2</u>	0.15	
3. The staff (Women, and men) are motivated to do their best.	<u>2.1</u>	0.25	<u>2.3</u>	0.15	7. The BAPO supports gender equality.	2.9	0.18	3.2	0.10	
4. The BAPO supports innovation.	<u>2.5</u>	0.25	2.8	0.13						

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

Table (7) shows the items of the Human Resources Material axis:

Human and material resources										GM
Items	Board		Members		Items	Board		Members		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. All members pay their dues Willingly in time.	3.2	0.14	3.3	0.09	6. The auditing committee oversees regularly the financial issues.	<u>1.9</u>	0.28	<u>1.8</u>	0.15	<u>2.2</u>
2. Our BAPO is financially independent.	<u>2.2</u>	0.25	<u>2.2</u>	0.15	7. Financial planning is regularly undertaken.	2.9	0.23	3.2	0.11	
3. The BPAO funding sources are diversified.	<u>1.7</u>	0.23	<u>1.7</u>	0.13	8. There is an adequate bookkeeping system that can generate monitoring information.	<u>1.4</u>	0.24	<u>1.7</u>	0.14	
4. Financial resources including grants and loans when available are effectively utilized.	<u>1.7</u>	0.25	<u>1.7</u>	0.15	9. The general assembly approves annually the financial statement.	3.3	0.16	3.3	0.09	
5. Material resources are effectively utilized.	<u>1.6</u>	0.25	<u>1.9</u>	0.15	10. The auditing committee oversees all financial transactions.	<u>2.3</u>	0.19	<u>2.5</u>	0.11	

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

Table (8) shows the items of the Governance axis:

Governance										GM
Items	Board		Members		Items	Board		Members		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. Most members participate regularly in all the statutory activities.	3.5	0.12	3.4	0.07	7. Enough information is available on the different courses of action of the BAPO.	3.6	0.09	3.4	0.07	3.2
2. The criteria for the election of our representatives (boards and commissions) are defined and known by all members.	3.8	0.08	3.6	0.06	8. The decisions made by our elected officials are followed in their application.	3.5	0.12	3.3	0.07	
3. Women and young people are adequately represented in elected bodies of our BAPO.	3.1	0.14	3.0	0.10	9. Reports are available to members, the board, and funders regularly.	3.3	0.16	3.1	0.08	
4. All decisions are made transparently.	3.6	0.12	3.6	0.07	10. Auditing activities are completed by external entities.	<u>1.2</u>	0.20	<u>0.9</u>	0.11	
5. Procedures for the decision-making by elected representatives of our BAPO are transparent.	3.7	0.09	3.6	0.07	11. Decision taken by the general assembly is compulsory to the executive Board and the absent members.	3.5	0.16	3.5	0.09	
6. Present members of the General Assembly participate in the decision-making process.	3.8	0.07	3.7	0.05						

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

Table (9) shows the items of the External Environment axis:

External environment										GM
Items	Board		Members		Items	Board		Members		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE	
1. The BAPO develops relations (linkages)with other stakeholders.	<u>2.7</u>	0.19	2.8	0.11	4. The BAPO has regular changes in the country's different fields: society, economy, etc.	<u>2.5</u>	0.17	<u>2.4</u>	0.12	<u>2.4</u>
2. The BAPO has adequate capacities in networking and in building alliances, especially with other farmer COOP on local, regional, and national levels.	2.8	0.17	<u>2.6</u>	0.11	5. The BAPO uses the technology that is supported by the overall level of technological development in the country.	<u>2.2</u>	0.22	<u>2.1</u>	0.13	
3. The BAPO has developed an economic partnership with other stockholders (e.g. donors, NGOs, and the private sector....).	<u>2.0</u>	0.24	<u>2.1</u>	0.14						

\*G M = General Mean for the axis

\*SE = Standard Error

Source: (Statistical Analysis,2020)

**Relevance axis:**

Table no (3) shows that the BAPO's Relevance was good (3.3), through all axis items to members and the board, especially monitoring and evaluation are valued at all levels of the organization as a way to improve performance, NABARD (2015) reported that, the PO should have various monitoring aspects to ensure that the business goals are achieved and the business is carried out professionally. but an item of the BAPO provides services to members regularly had a lower quality degree this services Stockbridge et al (2003) said like marketing services (input supply, output marketing, processing, market information), facilitation of collective production activities, financial services (savings, loans, and other forms of credit), technology services (education, extension, research). Education services (business skills, health, general), welfare services, (health, safety nets), policy advocacy, and managing common property resources (water, pasture, fisheries, forests), etc..., also Bizikova et al (2020) said the services POs should provide to their members like marketing services to increase product sales (such as connecting to specific markets to sell products, shared transport or storage of the products, and the establishment of contacts between PO members and buyers). Providing access to market information on product prices and trends, seasonality, and regional changes. Providing extension and educational services, both promote improved production and marketing practices, as well as build financial literacy. Other services, such as linking farmers to external programs, infrastructure development/management, and policy advocacy with local/sub-national governments.

**Efficiency axis:**

Table no (4) shows that the BAPO's efficiency was good (2.8), with weak member efficiency due to multi reasons such as poor internal and external training

provided by the (BAPOs) to their members, even if in cooperation with other organizations with similar activities (2.5), NABARD (2015) said the training also should cover management of the finances like maintenance of books of account, Management Information systems, share capital, borrowings, savings, loans, cash flow, funds flow, receivables management, payables management, investments, etc... In the member's view, the BAPOs are weak in agricultural marketing services for their members (2.5), NABARD (2015) suggest that the support marketing services for the (BAPOs) can be provided by government agencies responsible for producer organizations or other GOs and NGOs to POs to access markets for their products. Some of these activities are credits and/or grants for the setting up of marketing infrastructures for the sale of products. Support for marketing through rural and urban mart, and facilitating ties with buyers for grower organization products. BAPOs (on the members (1.9) and board (2) view) are not assessing their members' environmental awareness.

**Financial Viability:**

Table no (5) shows that the BAPO's financial viability was good (2.9), with weak in some items due to multi reasons such as the absence of a clear financial training plan (2.6). BAPOs (on the members and board view) do not depend on employees from outside membership to carry out their complicated mission (2.5), but rather on their members with no education, in this point Wanjiru, (2008) said The board may hire professional managers as employees of the PO, to manage the day-to-day business and report back to the board. Some of the reasons why they hire include: Elected leaders may not have time to manage the PO and their production. Members of the PO often have insufficient business and management skills and experience to manage the business effectively. Managing a business in a dynamic market requires quick

decisions making which is not possible with elected leaders who operate mostly in bureaucratic structures. Also, table (5) show poor the insufficient infrastructure supporting the work of POs such as (Storage, Computers, and Telephones ...) (2.1). poor attention was paid to BAPOs' equipment and machinery and their maintenance in the accordion to the opinion of BAPOs (members (2.5) and board (2.7)).

**Motivation axis:**

Table no (6) shows that there was a weakness of motivation within BAPOs (2.7), and this weakness is due to multi reasons such as the BAPOs are not sufficiently encouraged to better perform (on the members (2.3) and board (2.1) view). BAPOs do not sufficiently support dealing with agricultural innovations (on the board view (2.6)). Weakness in encouraging communication between members, employees, and board of BAPOs when problems analyzing (on the members (2.4) and board (2.6) view). Weak learning from the experiment (failure and success) (on the members (2.2) and board (2.1) view).

**Human Resources Material axis:**

Table no (7) shows that there is a clear weakness in the human and material resources of BAPOs (2.2) because of multi reasons, such as the lack of (BAPOs) financial independence (2.2). Lack of diversification and weakness of the BAPOs funding sources (1.7). Grants and loans are not used effectively and may not be available (1.7). Insufficient use of available financial resources (1.6). Weak financial review of the BAPOs by specialized review committees on the member (1.8) and board (1.9) view. The weak presence of an information generation and book-keeping system for the BAPOs (on the member (1.7) and board (1.4) view). Weak supervision from the audit committee on all BAPOs financial activities (on the member (2.3) and board (2.5) view). This is maybe

because of poor leadership, and this may lead to the collapse of the POs. Wanjiru (2008) said this is a case where the PO is not providing adequate services and the organization is not cohesive. If the PO over relies on external sources and there is a lack of common interest goals this will lead to low commitment, low financial or material contribution and therefore, no services can be provided. If there is poor leadership, members may get poor quality service providers or they may be unwilling to pay for the services.

**Governance axis:**

Table no (8) shows that the BAPOs governance was good (3.2) with weakness in activities reviewed by an external party (1.2) according to the members (0.9) and board (1.2) view. The result is good for the development of the work of POs in Sudan, especially in the decision-making clause, as Wanjiru, (2008) explained as PO grows and the number of members increases, it is not practical for every member to be involved in decision-making. There is a need to choose representatives to manage the PO on behalf of members. PO is governed by the two-level structures. Level one is when members participate at AGM. In most POs AGM involves all members and occurs once a year. Decision-making is usually conducted by vote and each member has an equal vote. The second level is made up of leaders elected at AGM. These leaders are elected for a limited term and together they form a management board.

**External Environment axis:**

Table no (9) shows that there is a clear weakness in the (BAPOs) external environment (2.4) in all axis items, according to the members and board view. One of the most important items in the external environment axis is the process of networking, which NABARD, (2015) said: The success of a PO depends on networking and continuous interactions with various stakeholders. The boards and staff should understand and importance of

networking to obtain maximum benefits mode.  
for their members under convergence

**The strengths and weaknesses:**

**Table (10) percentage of performance indicators according to a (BAPOs) members and board opinion:**

Performance indicators	%Members'	%Board	General Mean
Relevance	83	84	84
Efficiency	69	73	71
Financial dynamics	72	77	75
motivation	71	74	72
Human and material resources	59	61	60
Governance	80	83	82
External environment	60	64	62

Source:(Social survey, 2020)

Calculation of the general mean of performance indicators for BAPOs based on board and members' opinions:

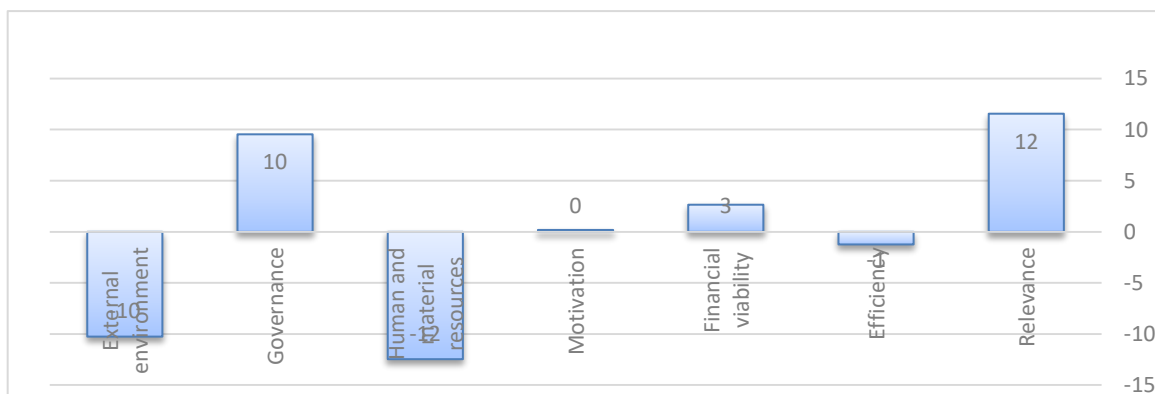
(Relevance = 84%), (Efficiency = 71%), (Financial Viability = 75%), (Motivation = 72%), (Human and material resources = 60%), (Governance = 82%) and (External environment = 62%).

**General Mean** =  $(84\% + 71\% + 75\% + 72\% + 60\% + 82\% + 62\%) / 7 = 72\%$  Approximation

**Table (11) Difference between Percentage of Performance Indicators and Overall mean (Global Note) by Members and Board Opinion:**

Performance indicators	General Mean Performance	Difference from the General Mean (72%)
Relevance	84	12+
Efficiency	71	1-
Financial Viability	75	3+
Motivation	72	0
Human and material resources	60	12-
Governance	82	10+
External environment	62	10-

Source:(Social survey, 2020)



Source:(Statistical analysis, 2020)

**Figure (1) the deviation from the general mean (the strengths and weaknesses):**



Table no (11) and Figure no (1) show there is a lack in any axes under or equal to (0) like (Human and material resources (12-), Motivation (0) and External environment (10-) and Efficiency (1-)). From figure (1) it is clear that there is a

weakness in (BAPOs) effectiveness caused by the low level of human and material resources to BAPOs and weak adaptation to the external environment of the organizations, and motivation weak.

**Table no (12) the relationship between motivation, human and material resources, external environment, and governance of producer organizations with their performance**

			Motivation	Human and material resources	Governance	External environment
Member	Relevance	r <sup>2</sup>	.708**	.400	.894**	.604*
		Sig.	.005	.157	.000	.022
	Effectiveness	r <sup>2</sup>	.756**	.694**	.542*	.723**
		Sig.	.002	.006	.045	.003
	Financial viability	r <sup>2</sup>	.833**	.690**	.563*	.491
		Sig.	.000	.006	.036	.075
Board	Relevance	r <sup>2</sup>	.716**	.518	.915**	.740**
		Sig.	.004	.058	.000	.002
	Effectiveness	r <sup>2</sup>	.575*	.523	.517	.751**
		Sig.	.031	.055	.058	.002
	Financial viability	r <sup>2</sup>	.821**	.624*	.808**	.712**
		Sig.	.000	.017	.000	.004

Source: (Statistical Analysis,2020)

r<sup>2</sup> = Pearson Correlation Sig. level = Significant level (2-tailed)

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

From Table no. (12) it is clear that there is an above-average positive correlation between motivation, governance, human resources, external environment of BPOs, and their performance indicators of suitability, financial feasibility, and effectiveness according to member and board of BPOs views.

### Conclusion

The decrease in human material resources level and weakness in the external environment and motivation for Basic Agricultural Producer Organizations (BAPOs) in Sudan has contributed significantly to the decline in organizations' efficiency and their poor performance. And must all producer

organizations responsible departments in central and state under the ministries of agriculture Administration implement urgent training programs at the state level in Sudan to increase knowledge and skills in management, and motivation and improve the external environment of organizations to increase performance efficiency of Basic Agricultural Producer Organizations (BAPOs) in Sudan.

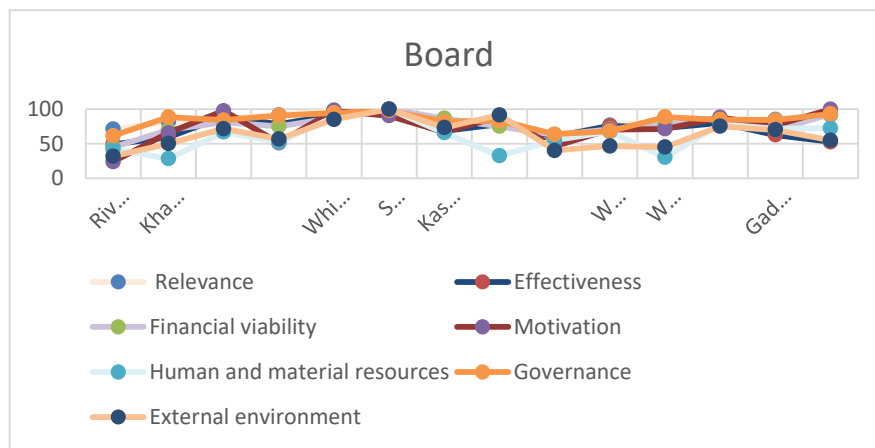
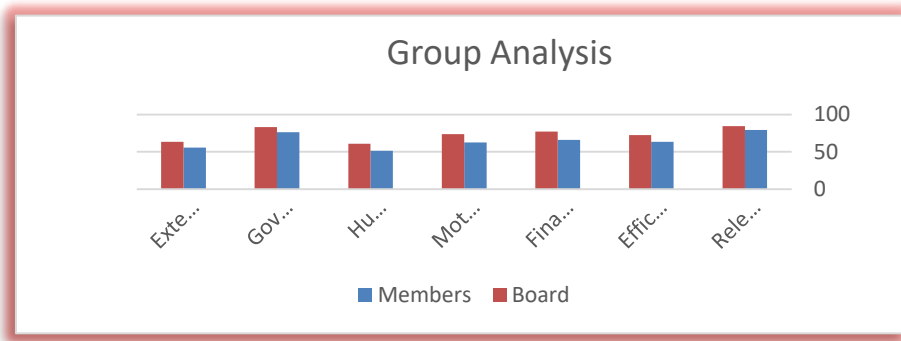
### References

BCAFM, BC Association of Farmers' Markets, (2016), Effective Leadership Through Better Governance - A Board Governance Training Manual, Vancouver.

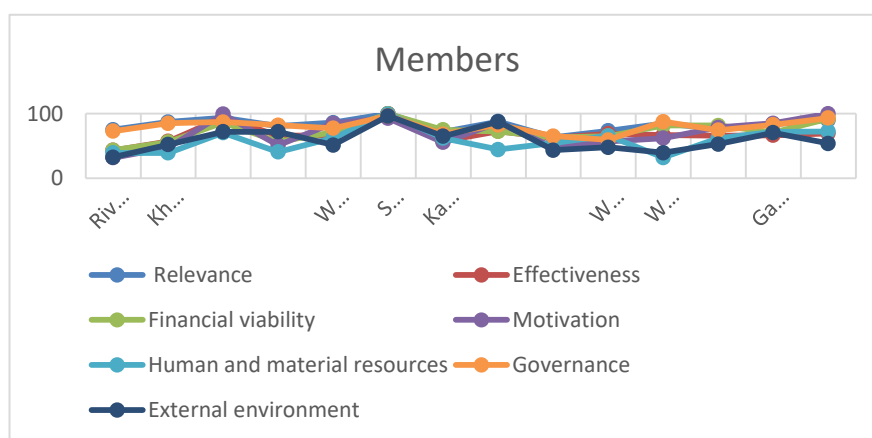
- Bizikova, Livia, Nkonya, Ephraim, Minah, Margitta, Hanisch, Markus, Turaga, Rama Mohana Rao. Speranza, Chinwe Ifejika, Karthikeyan, Muthumariappan, Tang, Lixia, Ghezzi-Kopel, Kate, Kelly, Julie, Celestin, Casandra, Ashley and Timmers, Beth, (2020), A scoping review of the contributions of farmers' organizations to smallholder agriculture, *Nature Food*, ISSN 2662-1355 (online), P620 – 630, <https://doi.org/10.1038/s43016-020-00164-x>,
- Fredericks, L. J., Kanlshoven, G., and Daane, J. R. V., (1980), The Role of Farmers' Organization in Two Paddy Farming Areas in West Malaysia, Wageningen.
- Moumouni, Ismail M. and Streiffeler, Friedhelm, (2010), Understanding the motivation of farmers in financing agricultural research and extension in Benin, *Quarterly Journal of International Agriculture* 49 (2010), No. 1: 47-68.
- (NABARD) National Bank for Agriculture and Rural Development, (2015), FARMER PRODUCER ORGANISATIONS, Mumbai – India.
- Pertev, Rashid, CIHEAM - Options Mediterraneennes, (1994), The role of farmers and farmers' organizations.
- Repucci, Sarah, (2010), A USERS' GUIDE TO CIVIL SOCIETY ASSESSMENTS, UNDP Oslo Governance Centre, Norway.
- Rocchigiani, Mariagrazia and Denis Herbel, (2013), Organization Analysis and Development, FAO, France.
- Rwelamira, Juliana, 2015, Strengthening Farmers Organizations and Civil Society Organizations, An Action plan for African Agricultural Transformation.
- Stockbridge, Michael, Dorward, Andrew, and Kydd, Jonathan, (2003), Farmer organizations for market access: A briefing paper. Wye Campus, Kent, England: Imperial College, London.
- Wanjiru, Jane, (2008), The Current and Potential Relevance of Producer Organizations A Case of Nyeri Branch Dairy Goat Association of Kenya, Van Hall Larenstein University of Applied Sciences, The Netherlands.
- Reports and website documented:**
- Indeed Editorial Team, (2021), 6 Important Workplace Adaptability Skills, <https://www.indeed.com/career-advice/career-development/adaptability-skills> (last scanned May 25, 2022).
- (LSBF) London School of Business & Finance (LSBF), (2020), What role does motivation play in managing an organization? <https://www.lsbf.org.uk/blog/news/business-economy/what-role-does-motivation-play-in-managing-an-organisation> (last Scanned, 27 May 2022).
- Rocchigiani, Mariagrazia, (2017), Methodological note Mapping and profiling producer organizations or cooperatives, TCP /RAB/ 3603, FAO
- Vulpen, Erik van, (2022), A Practitioner's Guide to Organizational Effectiveness, <https://www.aihr.com/blog/organizational-effectiveness/>(last scanned, 25 May 2022).

Yousif, Adil, (2018), Strengthening producer organizations in Sudan, Desk review, mapping, and profiling, TCP/RAB/3603, FAO.

Producers' Organization Coordination (POC), (2014 – 2019), Reports, Ministry of Agriculture – Sudan.



Source:(Social survey, 2020)



Source:(Social survey, 2020)

## تحليل أداء تنظيمات المنتجين في السودان

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### المستخلص

الغرض من هذه الدراسة هو تقييم أداء تنظيمات المنتجين في السودان، لتحقيق هذا الهدف تم اختيار تنظيم واحد لكل ولاية (14 ولاية) عشوائياً لتحليل الأداء. تم اتباع نهج المسح الإجتماعي. ويتألف كل تنظيم منتجين من 3 قادة مجلس إدارة (رئيس المنظمة والأمين العام وأمين المال) وما لا يقل عن 12 عضو. تم جمع البيانات الأولية من خلال استبيان. ويتضمن الاستبيان على 7 مؤشرات للأداء هي (الملائمة، الكفاءة، الصلاحية المالية، التحفيز، الموارد البشرية، الحوكمة، والبيئة الخارجية). تم استخدام تطبيق Excel لحساب النسب المئوية ونقاط القوة والضعف لكل مؤشر أداء. وتمثلت أهم النتائج في انخفاض محور الموارد البشرية، وضعف البيئة الخارجية والحافز، اللذين يتسمان بأهمية لتراجع كفاءة التنظيمات وضعف أدائها. أهم توصية هي تنفيذ برامج تدريبية عاجلة لتحسين المعارف والمهارات في مجال الإدارة، وتحفيز وتعزيز البيئة الخارجية للتنظيمات لزيادة كفاءة أداء تنظيمات المنتجين في السودان.