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CHAPTER



RESEARCH

Role of Higher Education Institutes in Sudan Post-war recovery

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ABSTRACT

PURPOSE: The current chapter explores the role of Higher Education Institutions (HEIs) in re-building post-war Sudan for sustainable development and peace resilience.

DESIGN/METHODOLOGY/APPROACH: The chapter takes an empirical analytical approach used in light of theoretical framework applications relevant to the topic. A structured questionnaire (open questions) was designed via an online Google form.

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RESEARCH LIMITATIONS: The designed questionnaire was only distributed to vice chancellors of Sudanese universities and Directors of Peace Centres affiliated to HEIs in Sudan as key informants.

FINDINGS: The role of HEIs in re-building post-war Sudan can be exemplified in the adoption of education for reconciliation programmes to foster co-existence and tolerance amongst different ethnic groups. Research and knowledge on the root causes of conflicts in Sudan should be undertaken and disseminated. Training and capacity building programmes should be designed to raise individuals' and community awareness on conflict resolution. In addition, social cohesion and civic engagement, influencing public policies related to post-conflict recovery, networking and partnerships with development and peace building curators, local leaders and community outreach should be promoted. There must be peace building and resilience in addition to maintenance of the devastated environment and natural resources.

ORIGINALITY/VALUE: This scientific contribution is an original research based on relevant concepts. The results of this contribution could be used by all Sudanese universities individually or collectively to take part in re-building Sudan after the war for sustainable development and peace resilience.

KEYWORDS: Sudan HEIs; Peace Resilience; Post-Conflict; SDGs; Sudan Post-Conflict

INTRODUCTION

Since the early 1990s, Sudan has witnessed substantial expansion in public and private higher education institutes (HEIs), covering virtually all States. The role of these institutes in development, and rural development *per se*, was duly acknowledged. HEIs were primarily mandated for qualifying skilful cadres in various realms of knowledge to meet the needs of the community and civil service, research, and community service. These three mandates are regarded as traditional pillars on which higher education was based. However, recent trends in higher education mainstreamed the role of HEIs in such a way to elaborate the outreach for more contribution in terms of value added research outcomes for entrepreneurship and job-generating graduates.

The Higher Education (HE) system is characterised by a range of HEIs including public and private universities, private colleges and technical university colleges. Statistics from 1975 to 2018 indicate a total of 128 HEIs of which 36 are public and 20 are private universities, 53 private colleges and 19 technical university colleges (MOHE, 2020). There are 36 public universities distributed in 26 cities across Sudan, and 20 private universities distributed in 6 cities, namely, Barbar, Khartoum, Omdurman, Wad Medani Elobeid and Kosti (see Figure 1). The number of students in HEIs increased from around 26,000 in the early 1980s to more than 300,000 in 2018. The rate of student gross enrolment in Sudanese universities has been increasing for the last 38 years, from 1980 to 2018 (Beshir *et al.*, 2020). HEIs include various disciplines; education, humanitarian aspects, social studies, administration and law, agricultural sciences (plant and animals), medical and health sciences, information technology and communication (ITC), engineering and others (see Figure 2).

The current chapter explores the role of HEIs in re-building Sudan in the aftermath of the current conflict to attain both sustainable development and peace resilience.

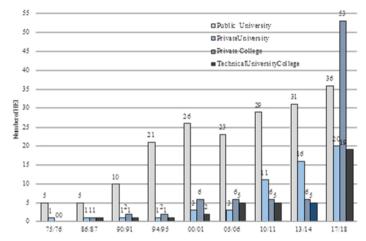


Figure 1: Higher Education in Situations Statistics in Sudan from 1975-2018

Source: MOHE. 2020

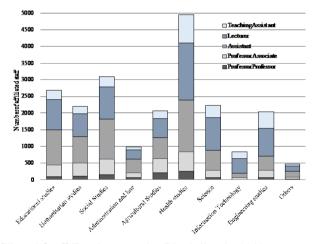


Figure 2: Gross Affiliated Staff Employment by Discipline in 2019

Source: MOHE, 2020

Sudan Current Conflict Background

Conflicts are processes, not static states, and over the last three decades developments in Sudan have gradually and consistently changed the nature of the conflict from being a classic ethno-religious conflict to one mainly over resources, with economic and resources crises in the North emerging as an impetus for Sudan's civil war (Suliman, 1997). The ongoing military confrontations that broke

Abdalla et al.

out on 15 April 2023 have posed rigorous repercussions on rural and urban communities in terms of growing human losses and physical injuries and disruption of livelihoods. This has led to mass displacement and migration, serious damage to infrastructures and public institutions, including HEIs, and inevitable increased risks of food insecurity due to the failure of the agricultural seasons and interruption in food materials supply chains. In addition, negative signs of ethnic, political and regional polarisation coupled with armed clashes have been witnessed.

Methodological Approaches

To attain the objectives of this study, a structured questionnaire (open questions) was designed via online Google forms and distributed to 32 vice chancellors of Sudanese universities; 11 key informants' responses were received. Another questionnaire (open questions) was also designed for Directors of Peace Centres affiliated to HEIs in Sudan; 11 responses were received from a total of 30 Peace Centres.

Theoretical Frameworks on Conflicts and their Analysis

Some relevant theoretical frameworks and approaches were used for the analysis to recognise and understand the nature, causes and resolutions of conflicts through various contexts such as relationships between individual persons, societies, organisations and nations.

Some theories and concepts on conflicts are recognised with their analysis and focuses. These are discussed below.

Relational Resilience in Protracted Conflicts

This concept focuses on how individuals and communities can develop robust and inclusive relationships during conflicts. Fostering relational resilience will lead to more constructive and sustainable development in targeted communities experiencing bitter conflicts (Nathan, 2024).

Anticipatory Governance for Conflict Prevention

This concept involves proactive measures for preventing conflicts before they escalate, utilising strategic planning methods addressing underlying causes of conflicts and promoting the United Nations Sustainable Development Goals (SDGs) (Milojević, 2024).

Transformative Mediation

This concept model focuses on changing the quality communication of between conflicting parties. It aims at empowering individuals to promote recognition of each other's perspectives towards conflict. Its success is measured by shifts in personal strength and interpersonal responsiveness (Bush and Folger, 2022).

Human Needs Theory

Conflict arises from the denial of basic human needs such as identity, security, recognition, etc. Burton (1990) emphasised the importance of addressing the underlying human needs that lead to conflict



rather than managing disputes. He argued that traditional methods of conflict resolutions often fail because they do not tackle their root causes. Application of this theory is on ethnic conflicts, civil wars or marginalised community struggles. Theory analysis will focus on understanding required needs that fuel resentment, hatred and violence amongst communities (Burton, 1990).

Conflict Transformation Theory

This theory deals with the opinion that conflict is not just a problem to be solved; it replenishes an opportunity for constructive transformation. It can be applied for re-building peace in post-conflict societies. Its analysis focuses on long-term change in society, relationships and restoring social structures (Lederach, 1997).

KEY OUTPUTS AND RECOMMENDATIONS

Universities can play a critical role in re-building sustainable development and peace resilience in post-war Sudan societies in the following realms (Figure 3):

Education for Reconciliation

The programmes will target fostering co-existence amongst different ethnic groups with tolerance and understanding, and heal wounds and hatred built among these divided communities. These programmes will provide platforms for dialogue amongst communities with different ethnic groups, political and religious backgrounds to breakdown stereotypes in order to be engaged in one cohesive society sharing the same goals and ambitions. Therefore, curricula concerning social integration and co-existence are to be developed and adopted for students in tertiary education.

The overall opinion of the interviewed Sudanese universities' Vice Chancellors is focused on design and adoption of curricula that push towards community reconciliation in post-war Sudan. Furthermore, training programmes launched by universities and the Ministry of Social Affairs, Culture, Youth, students and sports for courses related to dialogue and tolerance should be focused on the combat and rejection of tribalism and regionalism advocating for the development of Sudan and its advancement.

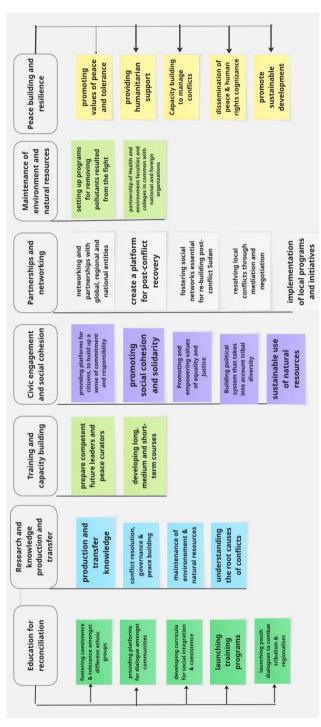


Figure 3: Role of Higher Education Institutions in Re-building Sudan post-war for Sustainable Development and Peace Resilience

Source: Study field survey undertaken by the authors, April 2025

Research and Knowledge Production and Transfer

Generally, HEIs play a significant role in production and knowledge transfer. A putative role for post-war recovery includes conflict resolution, governance, peace building, and environment maintenance to attain sustainable development. Such knowledge will be required for policy-makers to understand the root causes of conflicts to build sustainable peace strategies suitable for the needs of post-war societies. All interviewed Vice Chancellors stated that research should be directed to the production and transfer of knowledge to identify the root causes of conflicts in Sudan.

Training and Capacity Building

HEIs offer training and capacity building programmes for individuals, community-based organisations, trades unions and associations, in addition to organisations involved in peace making and building. These programmes will prepare competent future leaders and peace curators with skills making them capable of negotiating and managing conflicts for long-term social stability.

According to the interviewed persons, long-, medium- and short-term courses should include:

- conflict management;
- tolerance and acceptance of others;
- communication and strategic planning skills;
- reducing hate speech and discrimination based on colour, gender, religion;
- renouncing regional and ethnic intolerance;
- building and sustaining peace;
- combating harmful habits and gender-based violence;
- entrepreneurship and ownership of skills and income-generating activities;
- to be of a small and medium vocational and selective nature to fight poverty with attention to intermediate technology;
- consumer and production co-operatives;
- peaceful co-existence as a basis for building the state of Sudan with diverse ethnicities, religions and cultures; this diversity is the basis for building sustainable development;
- diversity in human resources, natural resources and climate, etc.;
- the concept of a state of citizenship;
- sustainable development and the United Nations decisions, specifically the 2030 Agenda for Sustainable Development;
- respect for the culture of pluralism and diversity and the need for teamwork quality / effective crisis management / wise leadership / strategic planning / culture of peace.



Civic Engagement and Social Cohesion

HEIs can provide platforms for citizens, especially youth, to build up a sense of commitment and responsibility towards society. Such engagement can promote social cohesion and solidarity towards rebuilding the society, attaining sustainable development and peace resilience.

The interviewees provided insights into the means of stimulating community cohesion and improving the social fabric in post-war Sudan as follows:

- spreading the correct educational, religious, cultural and intellectual concepts among the members of society;
- spreading the values of tolerance and respect;
- promoting and empowering the values of equality and justice;
- · fighting discrimination and hate speech;
- appointment to constitutional and administrative posts should be on a national basis rather than a regional or tribal basis;
- forward strong programmes to raise the religious consciousness, harmonious and parallel development;
- paying attention to the local cultures supporting this and reflecting them in various media programmes;
- attention to local natural resources, their exploitation and development for the benefit of local communities;
- building a political system that takes tribal diversity into account;
- cohesion and co-operation between communities, tolerance/team work/reconciliation programmes promoting social and economic justice, balanced development and citizenship;
- upbringing of future generations to leave behind violence, regionalism and racism;
- promote the principle of love for your brother what you love for yourself;
- economic policies that enable economic recovery and restore the role of the middle class to its prestige and role in society;
- general policies for the regulation of natural resources, the delimitation of these resources and how they are distributed among the components of society;
- legal policy by developing legislation that preserves the rights of society in terms of usufruct;
- the importance of having a leading role for the local community in developing policies in line with its culture and environment;
- people should be equal before law and justice in public functions, and the state should control the foreign presence in the country.

Partnerships and Networking

Global, regional and national networking and partnerships, such as scholars, peace-building curators, post-conflict recovery institutions, will unequivocally create a platform for knowledge sharing and provision of resources and support for sustainable development and peace-building process. Most HEIs have already signed agreements and ongoing collaborative projects in the realm of sustainable development and peace-building that will facilitate attaining the prescribed goals. HEIs can also foster the social networks essential for re-building post-conflict Sudan communities via student associations, community outreach, and partnerships with local community leaders (tribal leaders and community-based organisations) to strengthen the social fabric of the society that has been rigorously harmed by the current conflict. The role of community leaders in peace building and resilience towards sustainable development is well recognised in the following:

- community leaders play an important role in shaping community opinions and perceptions about peace;
- they act as a bridge between the local community and external organisations, facilitating communication and co-operation;
- they contribute to trust building between individuals and communities, promoting co-operation and joint action;
- they play a role in resolving local conflicts through mediation and negotiation;
- they support peace efforts and development through the implementation of local programmes and initiatives.

Maintenance of Environment and Natural Resources

The current conflict in Sudan has posed deleterious effects on the environment, natural resources and public health, in both urban and rural areas. Surface and ground water sources, soil and air are seriously affected. Trenches and road blocks made by rapid support forces (RSF) and Sudanese Armed Forces (SAF) made around cities and across the highways and roads exerted serious effects on the environment, causing public nuisance. Moreover, accumulated human bodies and remains, dismantled body parts and remnants of weapons and ammunitions are the most affecting factors. Through health and environment faculties and colleges in common with national and foreign organisations, HEIs should set up programmes for removing pollutants resulting from the fight.

Peace Building and Resilience

Peace building and resilience are steady processes whereby all community elements are committed to peace building and sustainability processes: women and youth have an important role in peace building. The interviewed sample of directors of peace centres affiliated to HEIs in Sudan pinpointed the main challenges faced in activating their role in the peace-building process; these include limited financial resources (60%), lack of specialised and skilled experts in peace building (40%).

Abdalla et al.

The role of peace centres is not well recognised by peace stakeholders (20%), and there is poor co-ordination amongst peace building curators (20%) in addition to political and social disputes. The respondents perceive that organising platforms for workshops and dialogues to promote reconciliation and tolerance amongst the community, and proactive participation in community reconciliation initiatives with relevant partners is also important. It was well noted that community leaders play an important role in shaping community opinions and perceptions about peace. The role of organisations in peace building is well recognised in terms of:

- contribution to promoting values of peace and tolerance through its programmes and initiatives;
- community support providing humanitarian support to conflict-affected communities, helping to restore stability;
- capacity building for individuals and local communities to enhance their ability to manage conflicts;
- contributing to spreading awareness about the importance of peace and human rights;
- promoting sustainable development through economic and social projects.

REFERENCES

- Beshir, M.M., Ahmed, N.E. and Mohamad, M.E. (2020): Higher Education and Scientific Research in Sudan: Current status and future direction. *African Journal of Rural Development*, Vol. 5, No. 1, pp.115-146.
- Burton, J.W. (1990): Conflict: Resolution and Prevention. New York: St. Martin's Press.
- Bush, R.A.B. and Folger, J.P. (2022): *The promise of mediation: The transformative approach to conflict.*San Francisco: Jossey-Bass.
- Lederach, J.P. (1997): *Building peace: Sustainable reconciliation in divide societies*. Washington D.C.: United States Institute of Peace Press.
- Milojević, I. (2024): Conflicts on the Rise: Is Anticipatory Governance a Solution? *Journal of Futures Studies*, Vol. 29, No. 1. Available at: https://jfsdigital.org/wp-content/uploads/2024/09/2.pdf
- Ministry of Higher Education (MOHE) (2020): Ministry of Higher Education and Scientific Research. Available at: www.mohe.gov.sd
- Nathan, D. (2024): Developing relational resilience in protracted conflict: A case study of the Artsbridge Model. Conflict Resolution Quarterly, Vol. 42, No. 1, pp.15-41. Available at: http://doi.org/10,1002/crq.21428
- Suliman, M. (1997): Civil War in Sudan: The Impact of Ecological Degradation. Contributions in Black Studies: A Journal of African and Afro-American Studies, Vol. 15, Article 7, pp.99-121. Available at: http://scholarworks.umass.edu/cibs/vol15/iss1/7

BIOGRAPHY



Professor Abdalla Mohamed Abdalla has a PhD from a programme split between the University of Khartoum, Sudan and CIRAD, France in the realm of Pest Management and Economic Entomology. He is currently the vice chancellor of the University of Kordofan in Sudan. Professor Abdalla has a variety of academic, research and managerial

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Professor Makeen Abdalla Makeen obtained his PhD in Botany (Cryopreservation) at National University, Malaysia in 2006. In 1995 he was a lecturer in the Department of Crop Sciences, Faculty of Natural Resources & Environmental Studies, University of Kordofan, followed by positions as Head of Department,

Faculty Registrar, Faculty Dean, and Secretary of Scientific affairs. Professor Makeen was then appointed as Vice Chancellor, Alsalam (peace) University for 5 Years. He is currently a professor in the same Department, undertaking under- and post-graduate education and research. He has published many papers and two chapters (Congress Library), and attended many conferences and workshops inside and outside Sudan. Professor Makeen has worked with proactive teams carrying out studies on socio-economic aspects, the last of which was on the effects of current war on Sudan's political economy and Conflict Analysis of Cash and Markets-North Kordofan State.



Dr Mohammed Hamed Mohammed is an associate professor of Forestry at the University of Kordofan. He has a PhD Forestry from the Technical University of Dresden, Germany. Currently, he is shouldering the responsibility of Dean, Deanship of Postgraduate Studies and Scientific Research, University of Kordofan. He has

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