



Role of Renewable Energy use towards Resolution of Conflict and Sustainable Peace in Sudan*

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Sudan's National Geographic and Cultural Tapestry

In different landscapes; a multitude of tribal and ethnic groups live in Sudan.

The two primary groups that shape the country's population are:

1. The "Pastoralists"

Nomadic Tribes

2. The "Agriculturists"

Settled Farmers



1. Nomadic Pastoralists

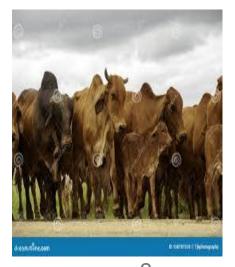
Are nomadic communities that traverse the vast Savannah and Saharan regions of Sudan, accompanied by their livestock.

Nomadic nature of their life resulted in low spread of regular education.



They have adapted to a mobile lifestyle, persistently facing conflicts due to resource competition and territorial disputes.

 Historical grievances and marginalization have
contributed to their challenges and resulted in build-up of militias.



2) The Settled Agriculturalists

- The populations that reside mostly along the river Nile and rain-fed areas. They engage primarily in agricultural practices.
- Have basic religious education and entertain allegiance to religious sects and leaders.
- Rarely carry arms or enter into conflicts.



Background to war in Sudan (A):

- 1. These two distinct ways of living have created an imbalance in local developments during colonial times and even after independence this could not be remedied.
- 2. The settled, more urbanized farmers population who, because of more education, have had more opportunities in government jobs and have historically participated more effectively in ruling the country. Their areas have had more medical services, local administration, and general governance functions.
- 3. The Colonial Government needed clerical and administrative employees and provided more schooling to non-nomadic tribes. The national governments did have feeble attempts at providing sufficient elementary schooling. Nomadism renders some barriers to this.

Background to war in Sudan (B): - The lack of schooling and scarcity of highly needed government services led to limited availability of clinics, hospitals, security, and police. Administrative units and effective and efficient governance were mostly lacking in nomadic areas.

- Administrative functions of nomadic areas, were mostly provided by tribal leaders through what was known as 'Local Administration'.

- The pastoralist tribes shared a large expanse of Savanah and desert lands. These were sufficient to sustain grazing throughout seasonal movements. However, this changed with an increase in population and animal stock. 6

Background of War in Sudan (C):

- The cattle-grazing activity and the overlap of many tribal areas led to frequent conflicts and incidents of in-fighting amongst nomadic tribes.

- Tribal settlements of clashes had their own local rules and were almost independent of the penal code stipulated by the government. Tribal leaders (and seldom a trained judge or lawyer) oversaw their courts. Money was often exchanged for a pardon in cases of death during a tribal court session.

- Many herdsmen used to carry weapons that used to be simple spears but soon advanced to machine guns. - The lack of an overall national plan for equitable service distribution has fuelled militia buildup and antagonistic stances. The buildup of militias had been instigated actively during the Bashir Muslim brothers rule at the beginning of this century.

- The militia leaders relied on the evident disparity in regional_development (particularly lack of educational and health services) to claim intentional marginalization of their own areas by the government. Some of them banded together and attempted an invasion of Omdurman and Khartoum in 2008.

-Some other militia groups declared open mutiny against the central government. Bashir's government resorted to the use of some of these militias against other militias! A major Genocide against ethnic African tribal groups was perpetrated in 2003 by the military in collaboration with a militia known as Janjaweed.

-The present war in Sudan, now, is led by two generals:

Burhan, the Sudan Armed Forces (SAF) leader, and Hemedity, a para-military militia leader (known as Rapid Support Force (RSF)). Both of whom were, formerly, supporters and collaborators with Al Bashir's dictatorship!

Background of war in Sudan (D):

Addressing the developmental disparities and fostering mutual understanding between the two major groups in the country (Farmers and Pastoralists) is essential for stopping the war and building sustainable peace. Sudan's severe and savage war occurs at a time at which rapid deterioration of the human environment is taking place.

At this point in history an energy transition from the use of fossil fuels to a carbon-emission-free "Green" Renewable energy sources is due to occur. When it is complete it will transform the overall activity of mankind.

The nomadic mode of human life has been undergoing, over many centuries, many transitions into the modern settled residential modes of living we know today. Renewable energy sources are becoming readily, and easily available anywhere. This will transform the nomada way of the nomada urbanized settlers' lives. Education, health services and administrative management will become much more accessible to pastoralists whenever, and wherever they opt for a residential transition.

Stopping war and Fostering a sustainable peace in Sudan:



Envisioned Role of Renewable Energy in Sustaining Peace in Sudan: Settlement of the Nomads

- 1. The prospect of Solar Energy use in Sudan points to a limitless, resource (A single solar panel anywhere in Sudan will yield more than three times the energy it may generate anywhere in Europe and each square km array of modern solar cells will provide 250 kilowatts.
- 2. Solar Power could play a crucial role in the ongoing war. It can address the human displacement crisis, assist in creating adequate shelters, power medical care services, and facilitate food transport and storage.
- 3. Additionally encouraging nomads to settle using solar power can foster development and lasting peace in the country and decrease or, altogether, nullify conflicts between the various regional factions in Sudan. International organizations, intergovernmental Bodies, and Aid Agencies should actively support the application of renewable energies during and beyond Sudan's current predicament.

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The Renewables Energy Centre

at the University of Science and Technology /Omdurman



 Building up the new premises and completing the process of updating the curricular content and relevant courses at the "Renewable Energy Centre" at the University of Science and Technology (UST) in Omdurman was completely interrupted by the war!

• The curriculum included detailed, full courses, on rural development and settlement of pastorals in Sudan. The course contents have been designed to teach Renewable Energy science and technology with appropriate detail, full emphasis, and attention to the specific needs of the local communities. It was obvious to the academic faculty and staff that the building of Sudan via appropriate technologies should not be in any way compromised by Militia leaders and warmongers calling on young people to join their preposterous and destructive deadly projects.

Stopping The War, attainment of peace and sustainability in Sudan

- Local Conflicting Parties:

Should cease-fire and start, together with civilians, rebuilding the country.

- International Organizations,

Intergovernmental Bodies,

Aid and Humanitarian Agencies:

Should actively support and employ

Renewable Energies during and beyond

Sudan's current predicament and glaring

impasse.