

Review Article

Can Democracy Contribute to Prevent Famines in Dry Lands Africa?

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Abstract

This article is an attempt to shed light on the interplay between democracy and famines. The aim of the article is to contribute to the sustainable development efforts in dry land African areas through a better understanding of famine causes by climate change, and elements that can only successfully operate within a democratic government to prevent the occurrence of famines. While there has been heated debate on famines for some years, increased climate change and conflicts over threatened natural resources appears to contributing to its speed and intensity in dry lands Africa. Therefore, the vulnerable communities inhabit in these countries are currently at risk from levels of famines that have significant impacts on lives, livelihoods and the prospects for sustainable development. Does regime type a matter for preventing famines in these highly variable environment areas? Regime type influences the institutional and policy arrangements for managing impacts of climate change and combats its associated famines. Democratic regimes are more responsive to their citizens' needs and interests than authoritarian regime. Democracy prevent famines may be achieved through democratic governance system, provision of basic services, freedom of choice, economic growth, and enact and implement of appropriate policies and legalizations in addition to securing equitable access for differentiated users to dry land resources and opportunities. This paper reviews the literature on dry land African countries climate change and its associated famines and the regime type (countries with data available). Thus the paper argues although the climate change, such as recurrent droughts, are the primary causes of the famines in the dry land areas of Africa, however democracy plays an important role in its preventing.

Keywords

- Famine
- Democracy
- Climate Change
- Droughts
- Dry lands Africa

INTRODUCTION

It can be observed that the environmental focus on the climate change debate has ignored contribution of political factors in preventing famines. The question arises why famines occur much more frequently in some dry land areas than in others need to be answered satisfactorily. Can democracy contribute to prevent famines in dry land areas with adversely affected by climate change? As famine is not only the result of climate change, but it has a political aspect.

Africa, dry lands cover 1.96 billion hectare in 25 countries (65% of continental landmass) [1]. Nearly 400 million Africans live in the dry lands of the continent (ibid). Dry lands African countries include Botswana, Djibouti, Eritrea, Mauritania, Namibia, Niger, Somalia, Mali, Sudan, Chad, Zimbabwe, Swaziland, Burkina-Faso, Kenya, South Africa, Mozambique, Senegal, and Ethiopia – see Figure 1 map of dry lands Africa. But not all of these countries were covered in this article due to lack of information. Almost all these countries experienced famines throughout their history.

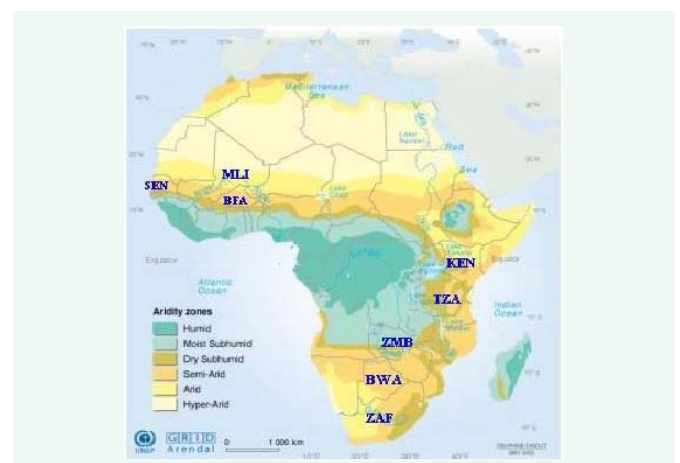


Figure 1 Dry lands Africa.

Source: Competence Platform on Energy Crop and Agro forestry Systems for Arid and Semi-arid Ecosystems- Africa (COMPETE) http://www.compete-bioafrica.net/current_land/Africa.html

Table 1: Categorization of African political regimes in 2006.

| Consolidating Democracies | Democracies | Semi-authoritarians | Autocratic |
|---------------------------|--------------|----------------------|-------------------|
| Benin | Comoros | Angola | Cameroon |
| Botswana | Kenya | Burkina Faso | Chad |
| Cape Verde | Lesotho | Burundi | DRC |
| Ghana | Liberia | Central African Rep. | Equatorial Guinea |
| Mali | Madagascar | Congo | Eritrea |
| Mauritius | Malawi | Côte d'Ivoire | Gabon |
| Namibia | Mozambique | Djibouti | Guinea |
| São Tomé & Príncipe | Niger | Ethiopia | Mauritania |
| Senegal | Nigeria | Gambia | Somalia |
| South Africa | Seychelles | Guinea Bissau | Sudan |
| | Sierra Leone | Rwanda | Swaziland |
| | Tanzania | Togo | Zimbabwe |
| | Uganda | | |
| | Zambia | | |

Source: [2] (2006), Democratic divergence in Africa: lessons and implications for aid – prepared for the workshop 'Africa beyond Aid', April 3-4, 2006, Potsdam, Germany.

However, famines continue to threaten with increasing regularity some of dry lands African countries, such as Ethiopia and Somalia. In Africa ten countries, labeled consolidating democracies, have gone far towards establishing democratic institutions with additional 14 democratizing countries have made noteworthy headway in adopting pluralistic practices [2]. However, some of dry lands African countries remain authoritarian – single-party regimes, personal dictatorships, or military rule. For details see Table 1 illustrates democratic and autocratic countries in Africa.

Dry lands are defined by the United Nations Convention to Combat Desertification (UNCCD) to include arid, semi-arid and dry sub-humid ecosystems characterized by low and irregular rainfall and high evapotranspiration that are subject to cyclical droughts. The arid and semi-arid region of Africa is characterized by a very high population growth (about 3.1%) with a population of about 50 million inhabitants; population density is often higher than in sub-humid and humid agro-climates [3]. With the dry land population increasing at the rate of 3% a year, the natural resources of Africa's dry lands must feed an additional 12 million people every year [1]. People in these areas are particularly vulnerable to the adverse effects of climate change and its associated famines.

The dry land Africa remains caught in a cycle of drought and famines. This is supported by a number of studies in many dry land African countries [4-6]. Of the many hazards that households face in these areas, periodic drought is particularly pernicious [7]. Most of these countries have limited resources and capacity. 12 of the world's 20 most disadvantaged countries are in dry land Africa [8]. As a consequence there is a growing incidence of famines in dry land African countries. Thus studying the interplay between democracy and famine could offer some insights on how democracy may best be prevented famines among these vulnerable people areas. The human capacities to assess and respond to risks of famines are weak, only inadequate or insufficient data exist, knowledge to address risks is lacking,

institutional capacity to support early warning systems¹ and policy responses are limited, as is access to financial, technical and human resources; these are true for all dry lands countries for which data exist. The impacts of climate change are significant in dry lands climate. It affected, and continues to affect the productive natural resources and in turn people's livelihoods, and thus have a serious impact on sustainable development. Natural resources are special economic goods because they are not produced and require proper management to provide sustained growth. Vulnerability is defined as the degree to which production and livelihood systems are susceptible to, or unable to cope with, adverse effects of climate change [9]. It is evident that the poor will be the most vulnerable to these changes in terms of risk to their production systems because they have fewer assets to call upon in order to cope with extreme events such as prolonged droughts [10]. This is to assume that climate change contributes to increase vulnerability of people to famines. Explanations for the 'Vulnerability' of dry land African countries to famine might be the result of lack of democracy and its institutions. One important point to consider is the potential and limitations of present institutions and policies on dry lands Africa areas levels.

This article deals with the democratic regime/institutions responses to famines that occur as consequences of the climate change. The current article highlights several elements commonly associated with a democratic government, such as governance systems, accountability and transparency, provision of basic services, and significant citizen participation. This article reviews the current literature on subjects related to the climate change, famine, democracy in dry land Africa and existing literature linking one or more of the aforementioned topics.

THEORETICAL FRAMEWORK

¹ The formal UN definition is as follows: "The provision of timely and effective information, through identifying institutions, that allow individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response" (International Strategy for Disaster Reduction ISDR, 2003).

A theoretical framework discusses the link between regime type and famines caused by climate change in African dry lands climates. It aims to explain if a regime type matter for prevention famine, which is better at preventing famine (democratic or autocratic regime). Identifying regime response during and after drought can be a way of exposing the underlying factors that foster vulnerability to famine and their interrelations. Such an approach may provide answers to the question of why droughts almost always develop into famines in dry land areas and reveal pathways of how the tenacious link between drought and famines can be broken by effective early response policies ... as this article aims to explore. The dry lands are increasingly recognized as the domain of multiple groups pursuing production strategies i.e. pastoralism and agro- pastoralism [8]. Climate change poses an immediate and far-reaching threat of famines to these agro-pastoral and pastoral communities of dry land areas of Africa. Despite not being recognized as an immediate policy priority, climate change in many dry lands Africa is expected to worsen food situation through extreme events, such as droughts. Agro-pastoral and pastoral livelihoods in the semi-arid zones of Africa are likely to be adversely affected by climate change [11]. Most people problems in dry land areas are associated with the availability of food and livestock production on which livelihoods depend. The opportunities for livelihood diversification are very limited. Declining crop yields and loss of livestock due ongoing extreme weather events are among the causes of food shortage and famines threaten. While climate change makes affected-people vulnerable to famines, regimes do make a difference, not only for adequate responsiveness to the demand of the vulnerable people but also for effective famine protection.

CLIMATE CHANGE IMPACTS ON DRYLANDS AFRICA

The world is currently on track towards a 3° to 4°C warming according to The Intergovernmental Panel on Climate Change (IPCC). Temperature increases of more than 3°C could lead to 0.4 - 1.8 billion more people at the risk of water stress [12]. Many scholars, however, are alarmed by the fast pace of climate change today. Changes in climate seem to affect dry land areas more harshly than other areas. Climate change has severe negative impacts on natural resources and consequently on food production and food security in these areas. Climate change is likely to add to the existing threats to food production and security in dry lands from a number of converging trends such as high population growth rates, water scarcity, and land degradation [10].

Dry lands African countries share common characteristics and the challenges facing most of these countries are the same. The areas are inevitably suffering the effects of climate change, especially drought. The majority of population in dry lands Africa depends on natural resources for their survival. Food consumption is closely related to domestic production, which in turn is closely linked to climate change. Most of the agriculture farming systems in dry lands Africa are rain-fed, crop production is thus highly vulnerable to the vagaries of the rainfall [13]. Numerous studies show that the agriculture production and pastoralism in most African countries and in turn food security depends upon the dry land natural resources base [14-17]. Dry areas often have low agricultural potential due to scarce or

uncertain rainfall, and fragile natural resources, property rights, infrastructure, and services are frequently inadequate, policy and agricultural extension tend to neglect such areas [18]. The largest portion of poor people lives in marginalized rural areas in dry lands. Rainfall is low and erratic, droughts are frequent, and soils are frequently poorly structured and infertile and food shortages are chronic and widespread [19]. Almost all dry lands Africa experienced droughts and famines throughout history, and famines continue to threaten with increasing regularity in some countries. In addition, climate changes among the causes of many of the violent conflicts have ravaged several African countries. Conflict is an inherent outcome of climatic variability, social, and institutional change [20].

In the uncertain future of climate change, it is expected for increasing extreme weather events and thus increasing possibilities of famines incidence. Several semi-arid areas of the world are vulnerable to environmental changes and are degraded partly due to reduction in the permanent plant cover [21]. Declining rainfall and frequent drought have major impacts on both the natural resource base and human systems [22]. Many dry lands human system were (and will continue to be) affected by the climate change, particularly water resources and agricultural productivity. Agricultural production and food security in many arid and semi-arid African countries are likely to be severely compromised by climate change and climate variability [12]. Projected reductions in yield in some countries could be as much as 50% by 2020 (ibid). According to FAO the Horn of Africa presents perhaps the most difficult challenge anywhere in the world to achieving the goal set out in the Rome Declaration and Plan of Action, to reducing by half the numbers of hungry and undernourished people by 2015. Policies and interventions strategies on dry lands Africa have failed to consider the special challenges and opportunities of these highly variable environments so far. It is nevertheless impossible to turn blind eyes on the apparent famines resulting from adverse impacts of climate change in dry lands.

Droughts² in Dry lands Africa

Based on the above background on climate change, droughts (and potential famines) are still a regular occurrence throughout dry lands African areas. The magnitude and intensity of the droughts in arid and semi-arid region of Africa have been on the increase over the last 100 years, and consequently in the destruction caused by it [23] including famines. The drought has direct impacts on food security through crops failure, declines in agricultural production and rising of food prices. Climate change is expected to increase both the frequency and severity of droughts in many dry land areas, and this will be compounded by greater uncertainty about the levels of risk involved [24]. The most severe consequence of frequent drought in some dry lands Africa is the recurrence of famine. The relationship between droughts and famines can often lead to the establishment of a vicious circle. The drought-affected people are often the most vulnerable to famine occurrence. According to FAO the extreme

² Drought has been defined as an extended period, a season, a year, or several years, of deficient rainfall relative to the statistical multi-year average for a region. NASA Earth Observatory: Drought: The creeping disaster. <http://earthobservatory.nasa.gov/Library/DroughtFacts/printall.php>

drought in 2011 affected more than 13 million people across the Horn Africa. The Horn of Africa has been affected by droughts almost every year for the past 12 years, and most severe droughts occurred in 2009 and 2011 [25]. As a consequence such countries have continued to face food shortages including devastating famines (for example the new famine in Somalia 2011–2012).

Increased intensity of droughts as impacts of climate change has significant implications for soil productivity, water supply, food security, and general human welfare in Africa [26]. Famines are often linked to drought in semi-arid areas of Sub-Saharan Africa where not only pastoralists, but also increasingly agro-pastoralists are affected [4]. Drought and lack of alternatives to water plants may lead to crop loss, reduced harvest, and feeds for livestock and thus famines and mortality in dry lands Africa, as it has been occurred in Sudan (2008), Kenya (2011) and Somalia (2011-2012). According to [27], recurrent drought caused crop failures and heavy livestock losses in parts of Ethiopia, Somalia and Kenya in 2011 and in 2012 there was a similar situation in the Sahel region of West Africa. When livestock lost and local crops failed, food shortages ensued and prices increased, thus leave people vulnerable to famines.

Somalia was worst hit by the extreme drought in 2011 and an estimated 4.6% of the total population and 10% of children under five died in southern and central Somalia³. The situation in Somalia is similar to what is happening in Sudan and some parts of Kenya which borders Sudan and Somalia. Sudan is a drought-prone country, but with a greater geographical concentration in the arid and semi-arid areas, droughts have taken place throughout the history of Sudan and, in many cases, they have been followed by famine [28]. Most famines in Kenya have been triggered by droughts and this relation persists [4]. The 2002–2003 droughts affected most of the southern African region. Across the Southern Africa region over 14 million people were threatened by famine [5]. Droughts left 659 000 people in Mozambique in particular in need of food aid [6]. Ethiopia remains caught in a deadly cycle of drought and famine, close to 14 million Ethiopians (20% of the country's total population) now have difficulty finding enough to eat [29]. As aforementioned since mid-20th century, recurrent droughts have caused severe famines in many dry land areas of Africa. However, there are many instances where drought is not leading to famine. While regions of the United States may experience drought over an extended period of time, famine does not result because individuals have the capacity to secure food from other sources [5].

Famines in Dry lands Africa

Famines associated with climate change impacts are expected to increase over time in dry land Africa, due to increase in frequency and magnitude of extreme events, as well as impacts of slow-onset events. In the 20th century alone between 70 and 80 million people may have died in famines [30]. In 2007-2008, the world experienced over one billion people going hungry [31]. Famines and war have devastated countries in sub-Saharan Africa such as Angola, Chad, Eritrea, Ethiopia, Mozambique, Rwanda, Sierra Leone, Somalia, and the Sudan [32,33] argues that famines often is related to civil conflict and war, and thus

³ Somalia famine 'killed 260,000 people' BBC News on 2 May 2013 <http://www.bbc.co.uk/news/world-africa-22380352>

famines almost always occur in the context of war. Vulnerable people may engage in conflict to secure their access to depletion natural resources. Although there is no single cause of conflict, however changes in climate are among the complexity causes of conflict. For instance, the root causes of conflicts in Darfur region of Sudan lay more deeply as an old conflict between sedentary farmers and nomadic herdsman over natural pasture and water.

The kind of problem that is facing dry land areas of Africa at present is political rather than natural. It is true that politics will not prevent drought but how the effects of drought are managed in the short-run and long-run is political and governance issue. Widespread famine following a loss of entitlements, hunger through food deficit at local levels and household food insecurity arise from a combination of biophysical realities and political and economic problems [34]. There are ample evidences from countries that get less rainfall than in dry land areas of Africa but which their names do not mentioned as 'needing food assistance'. Using Sen's phrases, such food insecurity situations are due to entitlement failures (entitlement defined as the command over food and non-food commodities) [35]. Food availability at the national levels does not provide food entitlement to the households and the individuals [36]. Famine prevention must therefore be concerned with the protection of entitlements rather than food availability per se [37].

One of the missing factors in efforts to address famines is democracy and adequate democratic governance systems. Policies and interventions strategies have failed to consider the special challenges and opportunities of famines in dry lands Africa. Thus, they are unhelpful for management of natural resource in such highly variable environment or to stop the adverse consequences of climate change such as famine. [38] argues that climate change not only requires major technological solutions, but also has political and socio-economic aspects with implications for development policy and practice. As indicated by [20] good governance is critical to response to access to productive resources and in turn preventing famines. [39] state donors began to offer aid selectively, that is, to countries with good governance, as a result in Africa a number of countries received less aid. Prevention famine occurrence requires complex interactions of political and socio-economic interventions.

POSSIBLE POSITIVE EFFECTS OF DEMOCRACY ON PREVENTING FAMINES

Dry land African countries economic development is particularly vulnerable to climatic events, with goods and services embedded in natural resources. Climate change alters dry land Africa capacity to provide these goods and services and rendering them more susceptible to degradation. Thus, dry land African countries need capacities and institutional arrangements that can help them build climate resilience sectors, or diversify away from highly vulnerable economic activities (that based on scared natural resources). But there is lack of democratic governance systems and inadequate sustainable development strategies which has made these countries vulnerable to famines. Poor governance, whether at local or national scales, will result in misallocation of resources, increased vulnerability of rural peoples, and environmental mismanagement [20]. That means democratic governments are required to build resilience through

investment in protection, restoration and management of natural resources. Thus, regime type weighs more heavily in conditions of crisis [40] such as climatic hazard and its associated famines.

Rising Demand for Democracy

Not surprising that in surveys in Africa, the majority of the respondents believes in the values of democracy and prefers it to other political systems [41]. The most recent round of surveys (conducted from 2011-2013), researchers studied public opinion regarding democracy; the findings indicate the rising public demand for democracy as a major trend [42]. Not just in Africa but across the globe, growing numbers of people express support for democracy as a value system [43]. In democratic situation, at least affected communities by crises can influence political outcomes through pressure groups and social movements. Civil society organizations and opposition parties lobby could influence policy makers and contribute to increasing political effective responds to deal with crises such as famines.

In many of the dry land African countries there is insufficient capacity to adapt system for early response to crises.

The presence of a democratic political system that is responsive and accountable has a prominent role to play in combat the adverse impacts of climate change including the prevention of famine. Democracy is popularly understood as government of, by, and for the people [44]. Policies critical for famines protection is also a viable democracies option. As [45] argues democracies act more decisively against famines than autocracies with policies aimed at preventing harm from all people affected by famine. Consequently, differences in response to famine between democracies and autocracies rely on the kinds of policies and interventions used in response to prevent famine incidence. This supported by [46] that democracies prefer more economic redistribution because they support a broader range of interests of the masses, whereas authoritarian regimes do not because they bolster the interests of the elite. At different governance levels appropriate responses are needed. If true, [20] point-out effective governance must facilitate flexible access to productive resources while limiting and managing conflicts that may arise as people and resources necessarily shift in space and time. Efficient allocation of resources may enhance outputs. In sum, democracy is prerequisite to address the challenges that climate change poses to dry land African countries. African leaders have made firm commitments, through the New Partnership for African Development (NEPAD), to promote democracy and good governance [47]. The variance between commitment and action remains an obstacle to the development of a comprehensive solution to prevent famines associated with the adverse effects of climate change in dry land African countries.

Sen's argument "No Famine in Democracies"

The current changes in climates have affected all dry lands African countries, but not equally. There is an amount of theoretical and empirical literature that supports a positive link between regime type (democracies in particular) and famine prevention. Amartya Sen's and other studies have found that countries with democratic regime have been able to prevent famines incidences [48]. Believes that famines are "so easy

to prevent that it is amazing that they are allowed to occur at all." This argument is supported by [30] that famines occur because they are not prevented, they are allowed to happen [49]. Confirmed the recent famines are political because they are almost always preventable. The only solution to famine, whether in time of peace or of war, is indeed democracy [33,35,57]. There is no famine in democracies, how sound is the Sen's argument? This means democratization can make a significant difference in prevention of famine. In other words, meet the challenge of famines requires democratic governments and institutions. As it is well known democracy enables the majority of people to express their preferences through elections and the participatory processes. No substantial famine has ever occurred in a democratic country where the government tolerates opposition, accepts the electoral process, and can be publicly criticized [50]. In democracies when governments face challenges such as the threat of climate change, they tend to allocate productive resources efficiently and equitably to produce sustainable results. In democracies also information about occurrence of famine is not usually kept hidden from public. In this regard, free press play a key role in spreading early warnings information on the effects of droughts, floods and other climate hazards on people affected by such hazards. Democratic government and its institutions are usually responding to demands of their citizens since people are usually able to voice their concerns. In democratic environment where people enjoy more rights and freedoms, they can lobby for the reform of policies that address their direct concerns. Democracy provides various groups with open spaces of political competition to represent their own interests and welfare [46]. As scholar Sen himself revealed to the importance of democratic institutions a vigilant press to disseminate information about food crises, free elections to ensure state accountability to its citizens in preventing famines. So, very likely, democracy may give opportunity to people to express its preferences for interventions and policies needed to prevent famines and transparency in decision-making processes. Since citizens' participation and perspectives (in particular those who are most affected) definitely make such processes more meaningful and comprehensive.

Famines are really a complex issue and needs to a have a comprehensive and integrated approach from bottom-up. Governance can be said to be participatory when poor people themselves participate in the definition and the evaluation of policies [47]. Political goodwill plays a big role in determining the success or failure of any interventions that might take place to prevent famines. In last few years, due to political failure, people in Sudan, Somalia or Kenya have united to feed and clothe starving venerable people in these countries. If the governments in these countries fail to put in place policies to ensure that this does not recur, people will be doing the same thing again next year and so forth. One of the gaps in activities and programs already undertaken to address famines effectively, is lack of capacity on the national level for assessing the risks of famines for the purpose of informing and facilitating action to address famines. In this regard issues of corporate democratic governance systems are very critical. African countries lack participatory governance [47]. Governance implies effective management of public resources, high level of accountability, and transparency and a

free flow of information and significant citizen participation are the quintessential principles of democratic institutions [51]. The political process delivers best in a context where it is challenged by civil society to live up to its promises [52]. Establishing democratic governance systems for preventing famines requires pre-requisite risk assessment at the local level; risk management approaches which address the need for vulnerable people; finance for risk management should mainstream into local level development planning; reduce the risk of famines with emphasis on adaptation and mitigation activities. Concerned institutions in democracies are usually learned from previous crisis and put such learns into practice such as improve drought response for famine prevention.

Democracy more than Autocracy Prevents Famine

As aforementioned, there is an extensive scholarly literature supporting the Sen's idea of relationship between type of regime and famine prevention. [45] argues that democracies are more effective than autocracies in combating famine. Democratic policy actions are very important to tackle climate change associated famines. Democracies are more likely to use policies that benefit all affected people by famine, not just targeted transfers for the benefit of small elite [45]. But polices cannot stand on their own and must be accompanied by other soft measures such as instruments that are designed to change behavior, provide information, protect rights, and provide education and build capacity. [53] States any government can, if it so desires, take effective measures to combat famine. Democracies more than autocracy protect property rights by allocate better the available resources to productive uses. This is in particular, where unequal access to property may keep large sections of the population vulnerable to adverse effects of climate hazards, including famines [40]. Found that democracies increase the allocation of resources to social programs relative to authoritarian regimes [54]. Studied the relationship between democracy and property rights, found that "democracy tend to protect property rights to a greater extent than non-democracy". There is a need to educate and inspire the highly affected people at grass-root levels on climate change reality. In this regard a sample of 44 African countries, [55] shows robust empirical evidence that democracies have spent more on education. Study by [56] indicated statistically that democracies are better at providing public services than autocracies.

Best way to test the effect of regime type and famine prevention is to compare between and within the countries that experienced frequent famines. This is to identify whether changes in the regime over times could account for the impact on famines prevention. It is important to notice that the mechanisms whereby democratic mobilization and democratic institutions prevented famines in African countries were historically constituted [53]. Botswana is one of the most drought-prone countries in Africa and it is also dry land region. In Botswana for example a comparable sequence of events between the 1970s and the 1990s created political (and electoral) imperative for an efficient relief policy [53]. In the period 1979-1984 many disasters caused a decline in food production by 17% in Botswana and by "only" 12% in Ethiopia; though the scale of agricultural disasters was much higher in Botswana, famine occurred only in Ethiopia because of

the lack of political incentives for action [57,58]. Botswana has been a widely regarded democratic country in Africa [59]. In contrast, Ethiopia is authoritarian, military and one-party state regime [60]. States "famine has become Ethiopia's trade-mark; it is still a threat in Ethiopia in part because of the lack of democracy till present". The previous regimes of Emperor Haile Selassie and the Derg serve as good examples where, respectively, the 1973-4 and 1984 famines occurred in the absence of democracy (ibid). Somalia has experienced the most dramatic famine in 2011-2012 [61]. Point out that Somalia has neither democracy nor a free press, which are two critical institutions for establishing a social contract for famine prevention between citizens and the state. This means that Somalia is "lacking an institutional context within which accountability should exist, both from the people to the national government and from the national government to the international community" (ibid). Thus famines continue to threaten with increasing regularity in Somalia.

Transparently and accountability, as mechanisms to respond to famines, exist and function in democracies, but both mechanisms are not at all in place in authoritarian regime. Transparency is a key ingredient to build accountability, which is necessary for the functioning of democracy. There is often a higher degree of political accountability in democracies. [52] states in a democracy where government is owned by the citizen, issues of accountability ought to be taken for granted. Assessment of the risk of famine associated with climate change impacts is often constrained by the limited availability of data and knowledge. In the case of famine threatens, the specific feature of transparency is that any vital information in this context should be made available to the public sphere. Transparency of a governance structure is ensured if there are robust and reliable processes of information sharing [52]. Transparency serves both protection of individual rights and facilitation of individual involvement in governance [51]. Thus, the transparency allows the public and other stakeholders to monitor government activities. Government transparency is a need for adequately involving the people who are most affected. Enhanced technical and institutional capacities supported by technical and financial assistance and other resources will help to determine, prioritize and address the needs to prevent famine associated with the adverse effects of climate change. [57] states if there are no elections, no opposition parties, no scope for uncensored public criticism, then those in authority don't have to suffer the political consequences of their failure to prevent famines. The vulnerable population and non-State stakeholders have to be aware and create positive participatory demand. The challenge is to ensure that the principle of accountability takes root, making the State responsible to its citizens for its actions [41].

What are those aspects of food rights can be exercised by individuals within a democracy that prevent famines?

The right to food is a human right. It is worth mentioning that the right to food has been reaffirmed in many pronouncements of the international community. The "Right to Food" was conceptualized through the UN's Universal Declaration of Human Rights in 1948⁴ and updated in 1999⁵ as the right to adequate

4 United Nations (1948) Universal Declaration of Human Rights – Adopted by the General Assembly of the United Nations on 10 December 1948

5 UN Economic and Social Council, Committee on Economic, Social and Cultural Rights (1999) General Comment 12 (Twentieth session, 1999) – The Right

food. The right to food requires States to provide an enabling environment in which people can use their full potential to produce or procure adequate food for themselves and their families. To purchase food, a person needs adequate incomes; the right to food consequently requires States to ensure that wage policies or social safety nets enable citizens to realize their right to adequate food⁶.

Rights-based approaches rely on States to provide quality food and sufficient quantity ensuring that individual rights are met. The right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement [62]. As duty bearers, governments are obligated to assure the realization of that right and accountable if the right is violated (ibid). Real actions on the ground have prevented food security from becoming a reality for many vulnerable people in many arid and semi-arid African countries. Since the State defines and enforces rights, protection of property rights and a sustainable management of natural resources contribute to fulfill people rights to food. Thus, respecting people rights to ownership and control of resources is undoubtedly increasing their food entitlement. A major requirement for the sustainability of any project is that the local population must be seen as partners in the project, with joint ownership [3].

Most arid and semi-arid African countries lack a comprehensive food policy framework to link food and environmental policies that directed at the prevention of famines. Such policy can offer more sustainable and safety food options. Although these countries ratified ICESCR, however lack of democratic government systems remains a significant impediment to the recognition and concrete implementation of the right to food. There is requirement of participation of affected population besides all non-state actors in terms of ensuring that the rights to food commitments have been fulfilled. The formulation and implementation of national strategies for the right to food requires full compliance with the principles of accountability, people's participation, decentralization, and legislative capacity, and particular attention to the need to prevent discrimination in access to resources for food [62]. The democratic government usually gives greater public voice to its citizens to permit a greater expression of their rights (including food rights) on public policy formation via a broader scope of democracy. Democratic governance systems can play a key role by linking the many factors needed to respect, protect and fulfill the right to food in dry lands Africa.

Participation of Dry lands People

Traditional knowledge about how local populations have coped with previous droughts (and associated famines) has the potential of providing important guide for addressing current and future climatic events [3]. Rain-fed farmers, pastoralists and other users of the natural resources have their systems of protection of famines and conservation of natural resources already in place. Most affected people do not wait until international frameworks

have been put in place or donors have decided how much to give for which activities and in which situations. The indigenous knowledge and priorities for preventing famines have often been ignored or swept aside by policymaking institutions. Records show that dry lands Africa has experienced marked rainfall declines and droughts that exceed those predicted by models of future climate [23]. The local communities in dry land region have survived till today with a fast population growth rate is an indication that they have developed indigenous mechanisms and strategies to cope with these droughts [3]. Vulnerable population have accumulated sufficient knowledge of the ways in which the adverse impacts of climate hazards may be reduced through both mitigation and adaptation, but that knowledge has not been and is not being incorporated into State climate change mitigation and adaptation strategies [63]. Studies of traditional risk reduction mechanisms show they are surprisingly effective in handling most climate risk, and have helped farm families and rural communities survive for countless generations in many drought prone areas [64,65]. Democracy supposes to give people the right to participate in policies and plans that affect their lives. Because a democratic government is more subject to demands from citizens [46] and therefore any adaptation and mitigation strategies passed should have the support of the majority of citizens. The involvement of local community in terms of their previous experience, proper utilization of local tools and technologies and maximum use of the limited resources usually help to improve the quality of famine prevention strategy. Governance mechanisms aimed at adaptation can support these coping strategies, by mainstreaming them into adaptation plans that can be scaled up to the countrywide level [66]. These play a crucial role in contextualizing the adaptation process and generating community-wide ownership (ibid).

Democracy tends to empower poor and enhance the equity. Empowerment and strengthening of civil society act as a pressure for the governments to respect the laudable objectives of transparency, accountability and good governance. Several of the good performance expectations are usually ascribed to democracy, such as greater political motivation, more communities' participation, among others. High levels of climate risk, especially drought, have always been a defining characteristic of dry land areas and the agricultural and pastoral societies that inhabit them have developed extensive but robust farming systems that enable them to survive many weather shocks [24]. Local communities have accumulated sufficient knowledge of the ways in which famines associated with the adverse impacts of droughts be prevented through coping strategies. Farm households and rural communities in dry land areas pursue a number of well honed strategies for managing risk [24]. Attempts to help the poor adapt to climate change must build on existing 'coping strategies' that generally involve three elements; preparing for harsh climates by developing various types of insurances, actually coping with the stress when it happens and thirdly, adapting and recovering from the stress [10]. Thus, the participatory process can help devise a more appropriate response that meets the real needs of affected population. Incorporating indigenous knowledge into climate change policies can lead to the development of effective mitigation and adaptation strategies that are cost-effective, participatory, and sustainable

to Adequate Food (Art. 11) E/C. 12/1999/5. 12 May 1999

⁶ Set out in article 2 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).

[67]. The bottom-up participatory approach encourages the highest level of local participation. Participation of affected people and mainstreaming their local knowledge and practices that have proven to prevent famines in policies should be an integral part of democracy. Democracy creates transparency in public affairs, enhance accountability between the state and its population and improve popular participation in decision making [68]. The participatory process is intended to give the general public, the poor in particular, a chance to influence policies that affect their living conditions by improving the definition and consideration of their problems and expectations, for these reasons, then, the notions of 'good governance' and democracy are now pointed out as decisive factors for the success of economic policies [41] and in prevention famines.

PREVENTING FAMINES TO ACHIEVE SUSTAINABLE DEVELOPMENT

Famines should not be treated as a separate issue, but always discussed in the context of sustainable development. Different approaches can be used to address famines within the sustainable development process. It is now acknowledged that food security and environment cannot be separated, but rather are mutually implicated in the concept of development sustainability [69]. Environmental factors and political and administrative environment can affect agriculture productivity and in turn preventing famines. In many ways, the shortcomings of governments explain not just the prevention of famines, but the failure of sustainable development in the dry land Africa more generally. The main question is that in democratic system is it possible to couple sustainable development and climate change to prevent famines? The answer is probably YES. Climate change is a development issue. Democracy is a crucial factor for development issues. Good institutions cause development [70]. Accordingly, democracy makes a difference. Climate change cannot be separated from sustainable development as sustainable development may be the most effective way to frame the mitigation question and a crucial dimension of climate change adaptation and impacts [71]. Democracy fosters sustainable development through a variety of mechanisms. These involve democracy in setting criteria, targets and timeframes; democracy in the selection process of decision-making and priorities; democracy in accountability, to gain the trust of the people and to enhance their participation in development. Democratic African countries that have instituted more cohesive institutions of shared power, private sector autonomy, and a free press have tended to enjoy more rapid, stable, and sustained development [2]. Governance, ownership, and participation are now becoming core elements of the sustainable development programs [41]. *For addressing climate change challenged problems to achieve the sustainable development, there is a need not only strategies but also building capacity of human resources and the integration of the drought relief program into the long-term development strategy for famines protection.* Hereby an important question is how much development policy can help with this? Climate change adaptation policies should be intrinsic elements of development policies, in order to ensure effectiveness of policies. Adaptation and mitigation measures must go alongside sustainable development policies, as well integration and recognition of

local knowledge and considering experiences of vulnerable communities facing environmental disasters and famines. The planned adaptation involves "...a set of conscious policy and financial decisions made before signs of climate impacts become apparent or just after the first changes take place" [72]. Data and information are required for the development transparency and testing of development policies. Effective responsive to famines and sustainable development must come together while at the same time also creating distinct challenges. Democracy may induce politicians to select a range of "good policies", like expanding access to education [56]. Going further, without prevention famines, sustainable development will not be possible. Addressing these challenges will require multiple measures on different levels interlinked with each other. How do governments make all the development achievements relevant to most vulnerable people at the grassroots level? This is possible through use of both bottom-up and up-bottom approaches in initiatives. There is no question that the sustainable development efforts should be climate resilient. This requires preparing and implementing plans, strategies and programs to address climate change and respond to and prevent its associated famines in the broader context of sustainable and climate resilient development. Nonetheless, the question whether states with risk of famine associated with climate change impacts would benefit in terms of sustainable development from democracy must remain open for further investigation.

THE WAY FORWARD

This article supports Sen's contention democracy is good prevention against famines. The contribution of this article is to argue that democratic governments contribute more effective than authoritarian ones to protect famines associated with climate change impact in dry lands Africa. There is an example of democratic country (i.e. Botswana) which has successfully prevented famines, while authoritarian ones (Ethiopia, Somalia) have not yet. Democracy is a good way to mitigate the adverse effects of climate change and prevent famines and thus start a sound sustainable development path. Governments' effective response systems are of a key importance in preventing famines. Existence of other elements is also of a key importance such as transparency, accountability, participatory and good governance which are necessary for the functioning of democratic governments. Many issues about the theory "democracy prevents famines" still have to be addressed. On the basis of this study findings addressing the following elements may leads the political way forward to prevent famines in dry land African countries:

- On the policy front, more needs to be done to ensure that people who are vulnerable to famines are protected. Thus, it is important to conduct a comprehensive assessment of the impact of policies on different groups (including those who are vulnerable to climate hazards) before their implementation so as to ensure that policy plays the role of reducing and not exacerbating famine risk.
- Active participation of affected communities in the adaptation planning, decision-making and implementation process through democratic participatory process. This will ensure ownership and full participation in adaptation projects.

- Development of pro-poor local adaptation to climate change requires promoting democratic and accountable local governance structures to raise awareness, ensure the exchange and integration of various knowledge and skills, identify needs and priorities, evaluate scenarios and build collectively negotiated strategies [66].
 - Famines prevention strategies will only be effective if they are widely adopted with relatively efficient means of dissemination and continuation, address the particular needs and concerns of targeted population, and fit better into local environmental and socio-economic circumstances. To increase people ownership, this vision should also include some indigenous knowledge and practices.
 - Strengthen institutional and human capacities to develop, generate and support famines early warning systems including among policy makers and other decision-makers. One important step in reducing the vulnerability of a climatic hazard is the development of an early warning system for the prediction or forecast of the event [73].
 - Undertake comprehensive risk assessments, where relevant, including through the preparation of hazard maps and risk profiles in key vulnerable sectors and to define and implement appropriate responses.
 - Democracies play a pivotal role in preventing famines, since democratic institutions are more responsive in famine situations. There is an immense need for more financial resources and technology transfers, accompanied by capacity building activities. Continue the process of learning about the impact of slow onset events, their interactions with extreme events and what approaches are available to build long term resilience to manage such events.
 - Monitoring and evaluation for famines prevention activities to work effectively and efficiently, there is a need for a regulatory body that monitors and evaluates progress, identifies challenges and redesign strategies. Without such a backstop mechanism too much a left to chance.
- According to [45] the field of famine studies is not one of great consensus among the scholars. While a short article like this is not enough in itself to address this vital issue, it is hoped that some of the ideas raised will invite further debate on this important area.
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