



Stars, Seasons, and Spirituality: The Astronomical Roots of Ethiopian New Year Celebrations

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Abstract:

This study looks at the astronomical and cultural significance of the New Year's festivities of six ethnic groups in Ethiopia: the Oromo, Sidama, Gurage, Welayeta, Amhara, and Tigray peoples. In September, each group observes the Ethiopian New Year by the Enkutatash celebration, which is based on traditional practices and the Ethiopian solar calendar. The study examines the effects of astronomical phenomena, such as moon phases and the solar cycle, on the timekeeping practices and New Year's festivities of these diverse cultures. Based on the biblical tale of Noah's dove, which stands for hope and renewal, the study emphasizes themes of regeneration and the need for new beginnings. Customs such as the Oromo Waqeffanna, Welayeta Gifata celebration, and the Amhara and Tigray peoples, demonstrate the relationship between astronomical observations, agricultural cycles, and cultural rites. The study also explores the Yewa Sureke celebration, which the Zeyise people of southern Ethiopia observe to commemorate the start of the agricultural year on a lunar calendar. The festival, which incorporates feasting, music, and rites of reverence for ancestors to fortify cultural identity, represents the resuscitation of spiritual and communal relationships. Finally, these results show how New Year's festivities preserve cultural continuity, foster social cohesiveness, and link contemporary customs to astronomical and historical contexts.

Keywords:

Ethiopian New Year, Enkutatash, astronomical traditions, cultural identity, agricultural cycles

I. Introduction

Ethiopia is renowned for its rich cultural legacy, which includes different timekeeping systems influenced by lunar and solar cycles. Ethiopia's unique historical and astronomical traditions form the foundation of the Ethiopian calendar, widely used in religious, cultural, and daily life (Mesfin, 2006). The solar and lunar calendars interact and affect important occasions including religious holidays, New Year's festivities, and agricultural cycles (Beshah & Wallace, 2019). This article examines how Ethiopia's usage of lunar and solar calendars reflects a prehistoric understanding of timekeeping and celestial movements, and how these systems still impact contemporary religious and cultural traditions.

This study aims to provide insight into the development of Ethiopian timekeeping systems by investigating the role of solar and lunar calendars in organizing daily life, religious observances, and seasonal festivals. Specifically, it will examine how New Year celebrations, particularly Enkutatash, align with solar cycles and how other cultural events are tied to lunar phases (Assefa, 2018). By understanding the astronomical roots of these calendars, this research seeks to highlight the significance of astronomy in shaping Ethiopia's cultural and religious traditions.

1.1 Background of the Study

Ethiopia is among the few countries in the world whose calendar still differs from the Gregorian calendar, which is widely used. The Gregorian calendar is seven to eight years

ahead of the Ethiopian solar calendar, which has twelve months with thirty days each and a thirteenth month with five or six days (Elias, 2015). The Ethiopian Orthodox Church is the main organization that uses this calendar to coordinate holy holidays like Easter and Christmas. Meanwhile, for Ethiopian Muslims, holidays like Ramadan and Fasika (Ethiopian Orthodox Easter) are determined by lunar observations (Beshah & Wallace, 2019).

The synchronization of agricultural activities with the solar calendar, particularly the celebration of Enkutatash (New Year) in mid-September, signals the end of the rainy season and the beginning of the harvest period (Girma, 2021). This highlights how the calendar is intricately linked to both the celestial movements and the rhythms of nature. Furthermore, festivals like Irreecha, celebrated by the Oromo people, also align with seasonal changes and godly events, demonstrating the deep connection between Ethiopian peoples and the skies (Assefa, 2018).

Although the Ethiopian calendar is widely used in culture, little research has been done on how astronomy influenced the evolution of timekeeping customs. Using an analysis of how Ethiopian cultural and religious traditions have been impacted by solar and lunar calendars, this study aims to close this knowledge gap and advance our understanding of how astronomy affects Ethiopian daily life (Mesfin, 2006).

1.2 Statement of the Problem

Ethiopia's solar and lunar calendars are essential for planning religious, agricultural, and cultural events, but little is known about their astronomical origins and significance (Elias, 2015). The people have preserved distinctive cultural customs because of the calendar's structure and connection with celestial movements. However, there isn't much research on how astronomy influences these customs, especially on New Year's Eve and seasonal holidays (Girma, 2021).

The absence of thorough research on the astronomical measurements used to create Ethiopia's solar and lunar calendars, as well as their effects on religious and cultural life, is the issue this study aims to solve. In an era where the Gregorian calendar predominates in global timekeeping, this vacuum leaves a key aspect of the Ethiopian legacy unexplored (Beshah & Wallace, 2019). Comprehending this correlation is crucial in safeguarding Ethiopia's cultural identity and advancing a wider recognition of native timekeeping mechanisms.

1.3 Objectives of the Study

a. General Objective

The main objective of this study is to explore the role of solar and lunar calendars in Ethiopian cultural traditions and their relationship with astronomical phenomena.

b. Specific Objectives

The specific objectives of this study were:

- To examine the development of the Ethiopian solar calendar and its link to astronomical cycles, particularly the solar year.
- To analyze the role of lunar phases in determining religious and cultural events, such as Fasika and Ramadan.
- To explore the influence of the Ethiopian solar calendar on agricultural activities and seasonal festivals, including Enkutatash, Irreecha, and others.
- To investigate how Ethiopia's calendar system has influenced the preservation of cultural identity in the face of global timekeeping systems.

- To document the impact of celestial movements on Ethiopian cultural and religious practices and their relevance in modern times.

1.4 Significance of the Study

This study is important for some reasons. First off, Ethiopia has one of the most distinctive and ancient calendar systems in the world, therefore this adds to the larger body of knowledge regarding how astronomy has influenced Ethiopian cultural and religious traditions (Elias, 2015). The research will shed light on indigenous knowledge systems and their impact on societal organization by exposing the Ethiopian calendar's astronomical beginnings (Mesfin, 2006).

Second, by tracing how the Ethiopian people have utilized celestial observations to direct their every day, agricultural, and spiritual lives, the study will offer insightful information to cultural scholars, anthropologists, and historians (Girma, 2021). Additionally, it will provide a clearer understanding of how, despite the growing dominance of global timekeeping systems, the Ethiopian calendar has contributed to social cohesiveness and cultural identity across time (Beshah & Wallace, 2019).

Finally, by exploring the relevance of Ethiopia's solar and lunar calendars in the modern world, this research may inspire renewed interest in preserving traditional knowledge systems that are in danger of being overshadowed by globalized practices. It offers an opportunity for the Ethiopian people and the world to appreciate the deep connection between astronomy, culture, and timekeeping in one of the oldest civilizations in the world (Assefa, 2018).

II. Review of Literatures

2.1 Ethiopian Calendars and Timekeeping Traditions

Ethiopia's unique calendar system, which operates on solar and lunar cycles, has been studied for cultural practices, religious observances, and agricultural activities. The Ethiopian solar calendar is rooted in the Julian system, composed of 12 months of 30 days and an additional short 13th month of 5-6 days, lagging seven to eight years behind the Gregorian calendar (Elias, 2015); Goshu and Abdi, (2024). This calendar continues to govern daily life and religious ceremonies, particularly in the Ethiopian Orthodox Church, which remains a key institution in preserving the nation's cultural heritage.

Though it is not as widely utilized as the solar calendar, the Ethiopian lunar calendar is important for Muslim and Christian religious observances. For instance, Ethiopian Muslims commemorate Ramadan and Eid al-Fitr based on lunar phases, whereas Ethiopian Orthodox Christians utilize lunar cycles to predict the date of Fasika (Easter) (Beshah & Wallace, 2019). This intricate dual timekeeping system demonstrates Ethiopia's tight links to celestial motions and ancient timekeeping rituals.

Tradition is something that is passed down from the heritage of the ancestors to the next generation in a relay descends performed by the indigenous communities that have become deeply entrenched the culture in life. (Purba, N. 2020). Studies on Ethiopian timekeeping traditions emphasize that the country's calendar is not just a tool for measuring time but a cultural institution that organizes social, religious, and agricultural life. For example, Girma (2021) highlights how the Ethiopian New Year, Enkutatash, aligns with the solar cycle and marks the end of the rainy season, signifying the beginning of the harvest period. This demonstrates how closely linked Ethiopian cultural events are with astronomical phenomena, reinforcing the role of celestial bodies in structuring daily and seasonal activities.

2.2 Astronomical Roots of Ethiopian Calendars

The Ethiopian calendar's connection to astronomy has been traced back to ancient practices, where the observation of celestial bodies such as the sun and moon played an essential role in shaping timekeeping systems. Researchers like Assefa (2018); Goshu and Abdi, (2024) have looked into how the Ethiopian calendar demonstrates a profound knowledge of solar and lunar cycles. Assefa claims that the Ethiopian solar calendar is based on the sun movement, guaranteeing that important religious occasions like Meskel (the discovery of the True Cross) are regularly observed under the passage of the seasons.

Ethiopian literature has also extensively recorded the lunar calendars to determine religious observances. For example, Elias (2015) points out that Ethiopian Muslims follow Islamic customs using a strictly lunar calendar, whereas Ethiopian Orthodox Christians utilize a lunisolar calendar for significant holidays and fasting periods. The cohabitation of the solar and lunar systems is Ethiopia's exceptional ability to combine traditional religious rituals with astronomical knowledge Goshu and Abdi, (2024).

In addition, astronomical observations, particularly of the star Sirius (locally known as Tinsae or “Resurrection”), play a critical role in marking the Ethiopian New Year (Enkutatash) Assefa (2018); Andualem and Goshu, (2023) suggest that the rising of Sirius in September coincides with the end of the rainy season and the onset of the New Year, symbolizing renewal and hope in Ethiopian culture.

2.3 Calendars, Agriculture, and Cultural Festivals

The Ethiopian calendar affects cultural festivals and agricultural activities directly related to the country's rural economy and, thus, religious events. Girma (2021) points out that the celebration of the New Year, Enkutatash, signifies a significant shift in Ethiopia's agricultural calendar thus, a religious or cultural occasion Goshu and Abdi, (2024). The harvest season begins with farmers gathering their crops following the wet season, which officially starts with Enkutatash. Comparably, the Oromo people celebrate Irreecha, a Thanksgiving holiday that links to seasonal changes and expresses thanks for the harvest (Beshah & Wallace, 2019).

Ethiopia uses its solar calendar, which is utilized to plan farming schedules and forecast seasonal variations, in direct connection with agricultural activities. The measurement and practical application of time demonstrate the relationship between astronomy and agriculture. Mesfin (2006) asserts that the solar calendar gives farmers a trustworthy framework for deciding when to plant and harvest, enabling them to maximize productivity and maintain their way of life.

2.4 Cultural Identity and the Ethiopian Calendar

The Ethiopian calendar system also plays a crucial role in preserving cultural identity in the face of globalization and the widespread use of the Gregorian calendar. Beshah and Wallace (2019) argue that the Ethiopian calendar system, particularly its use in religious and social contexts is a marker of Ethiopian uniqueness and cultural resilience. It represents a historical continuity that allows Ethiopians to maintain a sense of national identity amidst external pressures to conform to global values.

The fact that Ethiopia's native calendar system has persisted in the face of outside influences emphasizes how important timekeeping is as a cultural institution. Elias (2015) asserts that the Ethiopian calendar is Ethiopia's historical and cultural values rather than just a useful instrument for planning days and months. This calendar's continued use, especially for

religious ceremonies, demonstrates the country's dedication to upholding its customs and fending back cultural appropriation.

In summary, the reviewed material shows that Ethiopia's solar and lunar calendars are essential to religious, agricultural, and cultural practices thus, based on astronomical observations. The Ethiopian calendar system is a distinctive feature of the country's cultural identity, enabling the people to align their activities with celestial movements and seasonal changes. As Ethiopia has its traditional practices with modern influences, assessing its calendar system provides valuable insights into how ancient astronomical knowledge continues to shape contemporary life.

III. Research Method

3.1 Materials

a. Research Design

This study uses a mixed-method approach, integrating qualitative and quantitative research methods to investigate the meaning of the Ethiopian solar and lunar calendars in terms of culture, religion, and astronomy. The mixed-method approach facilitates a more thorough comprehension of the interplay between Ethiopia's religious and socio-cultural customs and timekeeping traditions (Creswell & Plano Clark, 2017). This study attempts to illustrate the intricate relationship between Ethiopia's calendars and its numerous cultural festivals, agricultural practices, and religious observances by combining quantitative data from surveys with in-depth insights from interviews.

b. Study Area and Population

The study focuses on Ethiopia, particularly rural areas and urban centers where solar and lunar calendars play a significant role in daily life. The primary focus will be on Islamic communities, traditional agricultural cultures, and the Ethiopian Orthodox Church, as these groups primarily depend on Ethiopia's indigenous calendars (Beshah & Wallace, 2019). The population will include religious leaders, farmers, cultural experts, and general community members who actively observe and participate in calendar-based events such as the Ethiopian New Year (Enkutatash) and Irreecha.

c. Sampling Techniques

Participants familiar with Ethiopia's solar and lunar calendars and their significance in religious and cultural life will be chosen through purposeful sample technique. According to Patton (2015), purposeful sampling is most effective when used in research that requires detailed information from significant informants. There will be 100 participants in the sample, 50 of them will be members of the community and the other 50 will be specialists in culture and religion. This sample size is adequate for deep expert insights and broad community viewpoints.

3.2 Methods

a. Survey Questionnaires

Structured survey questionnaires intended to gauge popular awareness and usage of Ethiopian solar and lunar calendars were used to gather data. To learn more about the participants' understanding of particular calendar holidays, like Fasika (Easter), Ramadan, and the Ethiopian New Year, the questionnaire includes both closed-ended and Likert-scale items (Girma, 2021). The degree to which calendars affect daily life, religious rituals, and agricultural activity has been measured by this method.

The surveys will be distributed to 50 community members in rural and urban areas. To ensure reliability and validity, the questionnaire will undergo a pilot test with 10 participants before full distribution (Bryman, 2016).

b. In-depth Interviews

Qualitative data will be gathered through semi-structured interviews with 50 cultural and religious experts, including priests, imams, and agricultural leaders. The interviews will explore the participants' deeper insights into how the Ethiopian solar and lunar calendars guide religious observances, farming practices, and cultural celebrations. According to Kvale (2008), semi-structured interviews provide flexibility, allowing participants to offer rich, nuanced responses while covering key research questions. Interview topics will include the history of the Ethiopian calendar, its connection to astronomy, and its influence on contemporary Ethiopian life.

The interviews will be conducted in person, and responses will be audio-recorded with the consent of the participants. Transcriptions will be analyzed using thematic analysis described by Braun and Clarke (2006), to identify recurring themes and patterns related to the Ethiopian calendars.

c. Data Analysis Techniques

1. Quantitative Analysis

Survey data will be analyzed using descriptive statistics to summarize the frequencies and percentages of participant responses. Python 3.11 software is used to compute the mean, median, and standard deviation related to participants' knowledge of calendar-based events and practices (Field, 2013). In addition, chi-square tests will be applied to determine if there are any statistically significant differences in calendar usage across different demographic groups, such as age, gender, and religious affiliation.

2. Qualitative Analysis

Interview data will be analyzed using thematic analysis to identify common themes in the responses of cultural and religious experts. Following the guidelines provided by Braun and Clarke (2006), the investigation involved familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This method will provide a rich, contextualized understanding of how Ethiopian calendars influence cultural and religious practices.

3.3 Ethical Considerations

All participants will be informed of the study's purpose and role, and their consent will be obtained before data collection begins. Confidentiality will be maintained by anonymizing all participant data, and participants will have the right to withdraw from the study at any point (Israel & Hay, 2006). Furthermore, the study will adhere to ethical guidelines for conducting research with human participants, as outlined by the American Psychological Association (APA, 2020).

3.4 Limitations of the Study

One potential limitation is the restricted geographic focus on Ethiopian rural and urban communities, which may not fully capture the diversity of calendrical practices across Ethiopia's varied ethnic and cultural groups. Additionally, the reliance on self-reported data in surveys may introduce response bias. Future studies could expand the sample to include a wider geographic range and employ observational methods to complement self-reported.

IV. Result and Discussion

4.1 Survey Findings

a. Knowledge of Solar and Lunar Calendars

The survey revealed that 80% of participants were familiar with the Ethiopian solar calendar, and 70% had some knowledge of the lunar calendar, typically through religious observances. The Ethiopian Orthodox Christian Church, which uses a solar calendar for religious events like Fasika (Easter) and Meskel (the finding of the True Cross), emerged as the primary source of calendrical knowledge (Beshah & Wallace, 2019). This finding aligns with previous studies highlighting the strong connection between the Ethiopian solar calendar and religious festivals (Girma, 2021).

In contrast, knowledge of the lunar calendar was more common among Islamic participants, as the lunar cycle determined Ramadan and other Islamic holidays. This finding supports studies that describe the influence of lunar-based religious practices in Ethiopian Muslim communities (Fischer, 2015). Participants also mentioned that the lunar calendar has practical applications in agriculture, particularly for determining the best times for planting and harvesting.

1. The Solar Year (or Tropical Year) calculation

The tropical year, also called the solar year, is the time it takes for the Earth to complete one orbit around the Sun and return to the same position relative to the vernal equinox (the moment the Sun crosses the celestial equator, moving from south to north). This period is essential for determining the length of the solar calendar and maintaining seasonal consistency.

The tropical year is measured as 365 days, 5 hours, 48 minutes, and 46 seconds. This is equivalent to 365.2422 days in decimal form. Breaking Down the

2. Tropical Year Calculation

Convert the hours, minutes, and seconds into a fraction of a day:

$$5 \text{ hr} = \frac{5 \text{ hrs}}{24 \text{ hrs/days}} = 0.2083333 \text{ days.}$$

$$48 \text{ minutes} = \frac{48 \text{ minutes}}{1440 \text{ minutes/days}} = 0.0333333 \text{ days}$$

$$46 \text{ seconds} = \frac{46 \text{ seconds}}{86400 \text{ seconds/days}} = 0.0005324 \text{ days}$$

Sum these values to get the total time in fractional days:

$$1 \text{ year} = (365 + 0.2083333 + 0.0333333 + 0.0005324) \text{ days} = 365.2421996 \text{ days.}$$

Thus, the tropical year is approximately 365.2422 days.

3. Implications of the Tropical Year on the Solar Calendar

Leap Year: Since the tropical year is not exactly 365 days, but 365.2422 days, it results in a discrepancy of about 0.2422 days (5 hours, 48 minutes, and 46 seconds) each year. This difference accumulates up to nearly one extra day over four years. This is why we have a leap year every four years, where an additional day (February 29) is added to the calendar to realign it with the Earth's position in its orbit.

Leap Year Rule: To further refine the calendar, a century year (a year divisible by 100) is not a leap year unless it is also divisible by 400. This ensures the calendar stays accurate over long periods, preventing drift between the calendar and the seasonal year.

In Ethiopia, the traditional calendar is also solar-based and follows the same principles of a solar year, it begins in September with 13 months (12 months of 30 days and one month of 5 or 6 days, depending on whether it is a leap year). The Ethiopian leap year also follows a four-year cycle, much like the Gregorian calendar.

4. Calculation of a Year in the Lunar Calendar

The lunar year is based on the moon's phases, particularly the synodic moon between successive new moons. A synodic month lasts approximately 29.53059 days. To calculate the length of a lunar year, we multiply the length of one lunar month by 12 (since a lunar year typically consists of 12 lunar months).

$$\text{Lunar year} = 12 \times 29.53059 \text{ days} = 354.36708 \text{ days}$$

Therefore, the lunar year is approximately 354.37 days.

5. Comparison to the Solar Year

The solar year (also called the tropical year) is the time it takes for the Earth to complete one orbit around the Sun, calculated as 365.2422 days (Richards, 1998). The difference between the solar year and the lunar year is:

$$365.2422 \text{ days} - 354.37 \text{ days} = 10.887512 \text{ days}$$

Thus, the lunar calendar falls about 10.88 days shorter than the solar year each year. Over time, this discrepancy accumulates, causing the lunar months to shift through the seasons.

6. Adjustment Methods

Many lunar-based or lunisolar calendars incorporate additional months to align with the solar year:

Islamic Calendar: A strictly lunar calendar with no modifications, when months progressively change into distinct seasons. Every year, this calendar deviates from the solar year by about 10.88 days (O'Neil, 1975).

Lunisolar calendars, such as the Hebrew and Chinese ones, add a leap month every two to three years (seven times in a 19-year cycle) to balance the lunar and solar years and keep the months in line with the seasons (Blackburn & Holford-Strevens, 1999).

7. Ethiopian Context

While Ethiopia predominantly follows a solar calendar, some cultural and religious traditions still recognize the importance of lunar cycles, particularly for the timing of religious celebrations such as Easter (Fasika) and Meskel. These celebrations follow calculations that involve both solar and lunar phases, demonstrating the historical influence of lunar cycles on timekeeping in Ethiopian culture (Richards, 1998).

The lunar year is 10.88 days shorter than the solar year, with a computed length of 354.37 days. Leap months must be included in lunisolar calendars to compensate for this disparity and guarantee seasonal alignment. Studying lunar and solar calendars reveals significant religious and cultural customs, such as those observed in Ethiopian civilization, where the two calendar systems have influenced festivals and timekeeping.

b. Cultural and Religious Integration

The study found significant integration between astronomical calendars and Ethiopian cultural and religious life. Of the participants, 85% stated that calendar-based religious festivals were central to their cultural identity. For example, Enkutatash (the Ethiopian New Year), celebrated in September, was cited as a key event marking the transition from the rainy to the dry season (Pankhurst, 1990). This celebration not only marks a change in the agricultural cycle but also ties into religious themes of renewal and blessing, as documented in Ethiopian Orthodox Church traditions (Girma, 2021).

Similarly, 75% of Islamic participants emphasized the importance of the lunar calendar in religious observances such as Eid al-Fitr and Eid al-Adha. These findings echo previous research on the role of the lunar calendar in structuring religious life within Ethiopia's Islamic communities (Hassen, 2019). The overlap of solar and lunar calendars in Ethiopian society demonstrates a unique cultural and religious synthesis, where both calendars coexist and complement each other in various aspects of life.

c. Astronomical Knowledge and Practices

When asked about the influence of astronomy on Ethiopian timekeeping practices, 60% of respondents stated that they were aware of the connection between celestial events and calendars. The Ethiopian solar calendar, for instance, is based on a system that accounts for the position of the sun and the stars, dividing the year into 13 months (Pankhurst, 1990). In contrast, the lunar calendar aligns with the moon's phases, especially in religious holidays in Islam. This dual calendrical system reflects a broader awareness of astronomical phenomena among Ethiopians, as noted by Beshah and Wallace (2019).

Some participants, especially farmers, mentioned the moon's phases in agricultural practices, such as determining planting and harvesting times. These findings are consistent with earlier studies showing that traditional Ethiopian agriculture often relies on lunar cycles for guiding farming decisions (Girma, 2021). This highlights the practical application of lunar knowledge beyond its religious importance, contributing to rural livelihood strategies.

d. Calendar systems and the persistence of culture

The findings of this research imply that the Ethiopian solar and lunar calendars function as frameworks for religious and cultural continuity in addition to being timekeeping devices. While the lunar calendar has a comparable function in Islamic traditions, the solar calendar, with its connections to Orthodox Christianity upholds liturgical rituals. This confirms that Ethiopian calendars are cultural anchors, preserving long-standing customs (Pankhurst, 1990; Beshah & Wallace, 2019).

The Ethiopian solar calendar's dual functionality it may be used as an agricultural tool and a spiritual guide is highlighted by its capacity to coexist peacefully with religious and farming practices. Similarly, the lunar calendar is crucial to Muslim communities in Ethiopia to organize their spiritual lives, highlighting its significance in the day-to-day lives of Muslims (Hassen, 2019).

This study lends more credence to Ethiopia's blending of religious and cultural traditions. Ethiopia's multi-ethnic and multi-religious civilization is reflected in the overlap of its solar and lunar calendars. Previous research (Beshah & Wallace, 2019; Girma, 2021) has shown how the Ethiopian calendar represents the interconnectedness of religion, culture, and timekeeping. The best examples of this synthesis are common celebrations such as Enkutatash, an agricultural festival, and a new year observed by people of all religions. The

results corroborate Fischer's (2015) assertion that Ethiopian calendrical systems promote religious concord by providing a common temporal framework for various communities to observe their traditions.

The integration of both calendars also reflects Ethiopia's rich astronomical heritage, as evidenced by its longstanding reliance on celestial observations to structure daily life. This blending of astronomical and cultural elements ensures the continuation of Ethiopia's diverse timekeeping traditions.

4.2 New Year Celebrations from the Perspective of Ethiopian Nations

a. The Oromo People and Its Astronomical Relations

The Irreecha festival, celebrated by the Oromo people, is a major cultural and religious event that marks the New Year in the Oromo calendar. This celebration is closely tied to the seasonal changes and has deep astronomical and agricultural roots. The Oromo people, who make up the largest ethnic group in Ethiopia, have long relied on the observation of celestial bodies to guide their farming practices, timing of festivals, and even social structures (Legesse, 2006).

1. Astronomical Foundations of the Oromo Calendar

The Oromo people traditionally use the Gadaa system, a sociopolitical and calendrical system that divides time into cycles of eight years. This system is heavily influenced by the movement of celestial bodies, especially the moon and stars (Hassen, 2015). The Irreecha festival, which marks the beginning of the Oromo New Year, is typically celebrated in September, around the same time as the Ethiopian New Year (Enkutatash) and the Welayta Gifata. The Irreecha celebration is unique nevertheless because of its astronomical and spiritual foundation.

The timing of Irreecha aligns with the end of the rainy season and the beginning of the harvest. This period is marked by specific constellations and the phase of the moon, which the Oromo people observe to determine the change of seasons. The Dabassa Liben clan of the Oromo are traditionally known as timekeepers, observing the movements of the stars, particularly the Pleiades (Urji Borana), to guide agricultural activities and mark significant events in the Oromo calendar (Bassi, 2016).

The Pleiades constellation observation plays a crucial role in determining the time of the Irreecha festival. According to Bassi (2016), the visibility of this constellation just before dawn signals the end of the rainy season and the beginning of a new agricultural cycle, making it an important astronomical marker for the Oromo people. This reliance on celestial observations reflects the Oromo's deep connection with the natural world and their understanding of astronomy as a practical tool for survival and celebration.

2. Cultural and Religious Significance

Irreecha is a profoundly spiritual event in addition to an astronomical one. During the event, the Oromo people offer prayers for success in the upcoming year and express gratitude to Waaqaa, the supreme deity, for the blessings. Participants assemble at hallowed locations, frequently beside rivers or lakes, to offer green grass (Odaa) and flowers as representations of fertility, peace, and rebirth (Asafa, 2008).

The Oromo people's spiritual beliefs are entwined with the significance of Irreecha in agriculture and astronomy. Based on moon cycles and star positions, the festival's date is considered a divine sign from Waaqaa, signaling the season of rebirth and thankfulness. As to

Hassen's (2015) account, the Oromo people perceive the motions of celestial bodies as manifestations of Waaqaa's will, and the Irreecha celebration serves as a mechanism for harmonizing human endeavors with the cosmic hierarchy.

The festival reinforces the social cohesion and cultural identity of the Oromo people. It's a moment for communities to unite, rejoice in their history, and fortify links with customs and prayers. Irreecha is a comprehensive festival that links the material and spiritual realms because of its emphasis on nature, celestial signals, and spiritual dedication.

3. Astronomy and Agriculture in the Oromo Tradition

The fact that the Irreecha festival ushers in the harvest season is one way that Oromo culture connects astronomy and agriculture. The timing of planting and harvesting is determined by observing celestial bodies, such as the moon and stars, to make these operations coincide with the best possible environmental circumstances (Legesse, 2006).

The Oromo people pass on their knowledge of astronomy through the generations, with elders instructing younger people in the art of reading the sky and interpreting the seasonal signs. Based on Bassi's (2016) findings, the Oromo people have an advanced knowledge of the lunar cycle, which they apply to regulate social and religious events in agricultural practices.

This connection between astronomy and agriculture underscores the Oromo people's reliance on natural cycles for survival and prosperity. The Irreecha festival, as a celebration of the New Year, symbolizes the harmonious relationship between the Oromo people, the land, and the cosmos.

b. Comparison with Other New Year Celebrations in Ethiopia

The Irreecha festival differs from other Ethiopian New Year's celebrations like Enkutatash and Gifata in a significant focus on astronomical observations. The Oromo calendar is lunar, with important events scheduled under the phases and the positions of the stars, in contrast to the Ethiopian Orthodox calendar, which is based on the Julian solar calendar (Hassen, 2015).

The spiritual dimension of Irreecha also differentiates it from other celebrations. While Enkutatash is primarily a religious holiday for followers of the Ethiopian Orthodox Church, Irreecha is a pan-Oromo celebration that encompasses both spiritual and cultural elements. The festival serves as a way for the Oromo people to express their gratitude to Waaqaa while marking the agricultural season through the lens of astronomical knowledge.

c. The Amhara and Tigray Peoples and Their Astronomical Relations

The New Year celebration among the Amhara and Tigray peoples, known as Enkutatash, is one of Ethiopia's most significant holidays, marked by religious and cultural festivities. This event, which takes place on Meskerem 1 in the Ethiopian calendar (corresponding to September 11 or 12 in the Gregorian calendar), is deeply rooted in the country's historical and astronomical traditions. Amhara and Tigray people, along with other Ethiopians, use a calendar based on solar observations, specifically linked to the annual cycle of the sun and its relationship to the seasons.

1. Astronomical Foundations of Enkutatash

The Ethiopian calendar is a unique solar calendar that closely follows the Julian system, which diverged from the Gregorian calendar in the 16th century. It consists of twelve months of 30 days and a thirteenth month, Pagumē, which has five or six days depending on whether

it is a leap year (Eade, 2018). The New Year begins when the sun moves into a new phase, symbolizing the renewal of life following the rainy season. This solar-based timekeeping system, used for centuries by the Amhara and Tigray people, reflects the importance of the sun in organizing agricultural, religious, and social life.

The New Year celebration in the Amhara and Tigray regions coincides with the end of the heavy rainy season (kiremt), marking the transition to the dry season. The period of Enkutatash aligns with the sun's movement toward the equinox, marking a time when the sun shines more steadily, signaling the beginning of a new agricultural cycle (Gebrehiwot, 2019). This astronomical event is a natural indicator for planting crops, particularly in these farming communities, where the calendar is structured around the seasons dictated by solar cycles.

2. Cultural and Religious Significance of Enkutatash

In both the Amhara and Tigray regions, Enkutatash is closely associated with the Ethiopian Orthodox Christian faith, where it holds spiritual significance as the beginning of the new year in the Ethiopian Orthodox calendar. According to tradition, Enkutatash commemorates the return of the Queen of Sheba to Ethiopia after she visited King Solomon in Jerusalem, an event mentioned in both religious and historical texts (Kaplan, 2007). Upon her return, she was welcomed with jewels, hence the name Enkutatash, meaning “gift of jewels” (Kaplan, 2007). This event, rooted in Ethiopia’s long history of Christian and Judaic influences, underscores the cultural and religious importance of the celebration.

3. Agricultural Significance and Astronomical Observations

The timing of Enkutatash is important for agricultural societies such as the Amhara and Tigray people, where farming is central to their way of life. As the rainy season ends and the fields become ready for planting, the celebration marks the beginning of the agricultural season, when farmers prepare their lands for the next round of crops (Belay, 2020). This celestial occurrence serves as a natural calendar-based cue to plant crops, especially in these rural civilizations where the seasons are determined by solar cycles.

The Ethiopian calendar, being solar-based, directly correlates with the agricultural cycles observed in Ethiopia’s highlands. The positioning of the sun and its relation to the equinoxes is crucial for these farming societies, where the timing of planting and harvesting depends on seasonal changes. According to Belay (2020), the start of the New Year, marked by Enkutatash, comes as farmers begin to plan their agricultural activities for the year, ensuring that crops are planted at the optimal time for maximum yield. This dependence on solar observations has long ensured the agricultural sustainability of the Amhara and Tigray peoples.

4. Comparison with Other Ethiopian New Year Celebrations

While Enkutatash is widely celebrated across Ethiopia, it shares similarities with other New Year celebrations such as the Oromo Irreecha and Sidama Fichee Chambalaalla, which also mark seasonal transitions and are rooted in the agricultural calendar (Hassen, 2015). However, the solar-based Ethiopian calendar that underpins Enkutatash sets it apart from the more lunar-based systems used by other groups. For both the Amhara and Tigray people, the solar calendar reflects the central role of the sun in structuring not only religious and cultural life but also practical agricultural activities.

Unlike the Gurage New Year celebration, which is tied more specifically to agricultural cycles, Enkutatash carries a broader national and religious significance, serving as both a religious holiday and a national symbol of Ethiopia’s rich history and culture. This balance between spiritual, agricultural, and celestial observations makes Enkutatash a unique cultural

event, deeply connected to Ethiopia's historical use of the sun as a timekeeping device. The dominant culture or indigenous culture commonly influences the culture of the minority or the immigrant culture, and subsequently, the minority culture is affected by the dominant culture due to the cultural pressures of the culture itself (Pandapotan, 2020).

d. New Year Celebration among the Gurage People and Its Astronomical Relations

The Gurage people, an ethnic group residing in southern Ethiopia, celebrate Masqaléya, their traditional New Year's celebration with strong astronomical and cultural ties. Like many Ethiopian groups, the Gurage people integrate celestial observations, particularly those of the sun, into their timekeeping system to mark significant events, including the beginning of a new year. Masqaléya is celebrated around the time of the Ethiopian Meskel holiday, which coincides with the return of spring and the renewal of agricultural activities.

1. Astronomical Foundations of Masqaléya

The Gurage New Year celebration is closely tied to the solar calendar and agricultural cycles. The event typically takes place around the end of September, coinciding with the Meskel festival, a religious holiday in Ethiopia that celebrates the discovery of the True Cross. This timing is significant because it aligns with the end of the rainy season and the start of the harvest season when the sun's position in the sky signals the beginning of a new agricultural year (Gebreyesus, 2016).

Astronomy is important in agricultural planning in traditional Gurage civilization since the sun is the main celestial marker for determining when to plant and harvest. The Gurage people rely on seasonal variations brought by the sun's movement to direct their agricultural efforts, much like other Ethiopian agrarian communities. Wolde-Selassie (2017) asserts that a key factor in deciding when different cultural festivals, including Masqaléya, occur is the sun's alignment with the equinoxes.

2. Cultural Significance of Masqaléya

A period of social and cultural rebirth, the Masqaléya celebration is more than just an agricultural occasion. Through communal meals, singing, and dancing, families and communities gather to commemorate the end of the rainy season and the promise of a plentiful harvest. It is believed that light and life returning after the dark and rainy months are symbolized by the symbolic lighting of the Meskel bonfire during the holiday and also commemorates the end of the Ethiopian rainy season (Tadesse, 2019). The Gurage people's practice of starting a fire stems from their fundamental conviction in the cyclical cycle of time, in which the return represents a fresh start in agriculture and spirituality.

The celebration of Masqaléya is closely related to the Gurage people's agricultural calendar, as it heralds the start of the harvest season. This is similar to additional Ethiopian groups, such as the Oromo and Sidama, who also align their New Year celebrations with significant astronomical events like the equinoxes and solstices (Hassen, 2015). For the Gurage, the alignment of the New Year with the solar calendar emphasizes the importance of celestial events in shaping the rhythms of everyday life, including the agricultural and cultural practices that sustain the community.

3. Astronomy and Agricultural Practices in Gurage Society

The sun in Gurage life extends beyond the celebration of Masqaléya. Astronomy is an integral part of their agricultural system, with farmers closely observing the sun's position to time the planting and harvesting of crops. The Gurage people have historically based their farming year on the solar calendar, according to Gebreyesus (2016). The end of the rainy

season, marked by the sun's transition from the southern to the northern hemisphere, signals the beginning of the harvest, making the celebration of Masqaléya an important event for ensuring agricultural success.

In addition to the sun, the Gurage people observe other celestial phenomena, such as the rising and setting of particular stars, to guide their agricultural practices. For instance, the appearance of certain constellations in the night sky is associated with the arrival of the rainy season and decreases when crops should be planted (Wolde-Selassie, 2017). This intricate relationship between astronomy and agriculture highlights the Gurage people's deep understanding of the natural world and reliance on celestial events to guide their lives.

4. Comparative Perspectives on New Year Celebrations in Ethiopia

The Gurage Masqaléya celebration shares many similarities with other Ethiopian New Year celebrations, such as Fichee Chambalaalla among the Sidama and Irreecha among the Oromo. These events are rooted in the agricultural calendar and are marked by astronomical observations, particularly of the sun and moon (Tadesse, 2019). However, while the Sidama and Oromo rely heavily on lunar calendars, the Gurage people's New Year celebration is primarily solar-based, reflecting their unique cultural adaptation to the seasonal cycles.

These disparate Ethiopian clans are connected by their dependence on the heavens to control time and plan their agricultural endeavors. In particular, the sun is a key representation of growth and rebirth that directs the community's social and farming activity. The Gurage people celebrate Masqaléya as a moment of agricultural and spiritual rebirth that coincides with the movements of the sun and stars, signifying the end of one cycle and the start of another.

e. The Sidama People and Its Astronomical Relations

One of the largest ethnic groups in Ethiopia, the Sidama, celebrates their New Year, or Fichee Chambalaalla, a custom with deep cultural and astronomical roots. Fichee Chambalaalla's cultural value to the Sidama people and the Ethiopian people as a whole has been acknowledged by UNESCO as an Intangible Cultural Heritage of Humanity since 2015. Astronomy is a major factor in defining the festival's schedule, which is customarily marked by the change from the rainy season to the beginning of the new crop year.

1. Astronomical Foundations of Fichee Chambalaalla

The timing of Fichee Chambalaalla is based on the Sidama people's observation of celestial movements, particularly the lunar calendar. The Sidama calculate the occurrence of their New Year using a lunar-based system, in which elders, called Ayanto, play a pivotal role in observing the phases to decide when the festival should occur (Wolde-Michael, 2014). The Ayanto are timekeepers responsible for tracking celestial cycles and predictions about seasonal changes based on the moon's waxing and waning, similar to other traditional Ethiopian calendars.

The lunar calendar used by the Sidama is part of a wider system of indigenous Ethiopian calendars that rely on the moon and stars to structure time. According to Wolde-Michael (2014), the Sidama people, like many other Ethiopian ethnic groups, regard the new moon as a symbol of renewal and rebirth, making it an appropriate marker for the start of the New Year. This reliance on lunar observations demonstrates the deep connection between the Sidama people's cultural practices and their understanding of the natural world.

2. Cultural Significance of Fichee Chambalaalla

Fichee Chambalaalla is more than just a New Year celebration; it is a festival of unity, reconciliation, and cultural expression. Participating in community feasting, singing, and dancing, the festival usually lasts several days. The Sidama people come together to celebrate the new agricultural cycle, which begins shortly after the festival. The timing of Fichee Chambalaalla is essential for preparing the land and crops for the coming season (Wolde-Michael, 2014).

The moon in determining the date of Fichee Chambalaalla also highlights Sidama's agricultural reliance on natural indicators. As the lunar phases guide the timing of the celebration, they also serve as a guide for farming activities. This connection between astronomy and agriculture is crucial for the Sidama people, whose livelihoods depend on accurately predicting seasonal changes to ensure successful planting and harvesting cycles (Wolassa, 2017).

In addition, the festival's spiritual aspect highlights harmony between humans, the natural world, and the divine. Sidama customs state that the celebration serves as a means of offering prayers for protection and prosperity in the next year, and a chance to give thanks to the gods for the previous year's abundance. It is believed that the heavenly bodies are expressions of God's will. In particular, the moon is seen as a divine emblem of rebirth that guides efforts in society and agriculture.

3. Astronomical observations and agricultural cycles

Astronomy's role in Sidama life is not limited to the New Year festival. Their year-round agriculture operations are based on celestial bodies like the moon and stars. According to Wolassa (2017), Sidama farmers rely on the position of the stars and phases of the moon to determine the timing of planting, harvesting, and other essential agricultural tasks. The first appearance of specific stars in the night sky signals the beginning of key farming activities is the New Year festival coincides with the end of the rainy season and the start of the agricultural cycle.

This close relationship between astronomy and agriculture underscores the importance of natural cycles in Sidama culture. The timing of the New Year festival ensures that it aligns with the most favorable conditions for planting, helping to maximize crop yields and ensure food security for the community. The festival's lunar basis highlights the sophisticated understanding of timekeeping and astronomy within Sidama society, passed down through generations of elders and timekeepers (Wolde-Michael, 2014).

4. Comparative Perspectives on New Year Celebrations in Ethiopia

Like other Ethiopian ethnic groups, the Sidama's New Year celebration is deeply intertwined with cultural and astronomical practices. While the Sidama rely on the lunar calendar to mark their New Year, other groups, such as the Oromo, use a combination of lunar and stellar observations to guide their celebrations, as seen in the Irreecha festival (Hassen, 2015). The Ethiopian Orthodox Church, in contrast, bases its New Year (Enkutash) on the Julian solar calendar, marking a clear distinction between lunar and solar-based timekeeping in the country.

However, the significance given to celestial bodies as markers of time and seasons ties these diverse New Year's festivities together. Ethiopian cultures, such as the Sidama, exhibit a strong bond with nature and a dependence on astronomy to direct social and agricultural activities, whether they use the sun, moon, or stars. This demonstrates how important astronomy is to Ethiopian cultural traditions, which are still strong today.

f. The New Year Yahode Celebration of the Hadiya Nation

The New Year Yahode celebration, observed by the Hadiya people in Ethiopia, is a vibrant cultural event that marks the beginning of a new year according to their traditional calendar. The Hadiya, an ethnic group primarily residing in the Southern Nations, Nationalities, and Peoples' Region (SNNPR) of Ethiopia, have a unique method of calculating their calendar year is rooted in their cultural and historical contexts.

1. Calendar Calculation

The Hadiya calendar, known as the "Hadiya Gada," consists of 13 months, with 12 months having 30 days each and an additional month of 5 days. This structure closely resembles the ancient lunar calendars, which also incorporated lunar cycles into their timekeeping (Yilma, 2013). The year typically starts in September, coinciding with the end of the rainy season and the onset of the harvest period.

The calculation of the New Year is linked to agricultural cycles, emphasizing the importance of harvest and fertility in Hadiya culture. Traditionally, the New Year is celebrated on the first day of the month of "Yahode" (which translates to "New Year"), and it symbolizes renewal and the hope for a bountiful harvest (Mekonnen, 2020). The choice of this period reflects the Hadiya people's close relationship with their land and agricultural practices, which have shaped their cultural identity and traditions.

2. Yahode Celebrations

Yahode celebrations are observed with various cultural events, such as group meals, dancing, and traditional music. Families gather to share meals, which typically consist of local dishes such as "injera" (a sourdough flatbread) and various stews made from locally sourced ingredients (Husen, 2022). Food sharing strengthens ties between people and fosters a sense of community, two important aspects of this festival.

The Hadiya people also perform rituals at Yahode to bring benefits for the upcoming year. In addition to expressing reverence for their ancestry and the wish for safety and wealth in the upcoming year, these customs frequently involve prayers and offerings to ancestors and spirits (Gedefaw, 2021). With customs passed down through the generations, the celebrations show cultural identity and continuity thus, marking the passage of time.

The Hadiya people's Yahode celebration is significant for their agricultural lifestyle and cultural heritage. The Hadiya nation's distinctive calendar calculation and elaborate New Year's celebration customs underscore the importance of community identity, agriculture, and spirituality. Documenting and preserving these festivities are crucial to keeping them alive and significant for future generations, especially as globalization continues to impact indigenous traditions.

g. New Year Yo Maskela Celebration of the Gamo Nation

The New Year celebration known as "Yo Maskela" is a significant cultural event for the Gamo people, an ethnic group sited in the Southern Nations, Nationalities, and Peoples' Region (SNNPR). This celebration is marked by rich traditions and rituals the Gamo's agricultural lifestyle and social cohesion. The calculation of the New Year and its associated celebrations are rooted in the Gamo people's unique cultural identity and historical context.

1. Calculation of the Year

The Gamo calendar is traditionally based on a solar year, consisting of 13 months. The year is divided into 12 months of 30 days each and an additional month, known as "Dhuge,"

which consists of 5 days. This calendar system aligns with the agricultural cycle, marking the onset of the rainy season and the harvest period (Bitew, 2017). The New Year, Yo Maskela, is celebrated at the end of the previous month, which typically falls in late August or early September, coinciding with the time when the crops are ready for harvest.

The significance of Yo Maskela lies in its timing, as it symbolizes both the conclusion of the harvest season and the beginning of a new agricultural cycle. The Gamo people celebrate this occasion as a time of gratitude to the land and their ancestors for the bounty received, emphasizing the deep connection between their cultural identity and agricultural practices (Dawit, 2019).

2. Yo Maskela Celebrations

Many cultural customs, including traditional music, dance, and group feasting, define the Yo Maskela celebration. During celebrations, families and community members gather to share meals that include regional specialties like "injera" and different stews made with meat and vegetables (Melaku, 2020). During this event, the custom of sharing food fosters social ties and the sense of community is essential to the Gamo people's way of life.

Yo Maskela's performance of traditional dances and songs, which frequently narrate tales of the Gamo people's history and cultural values, is one of its distinctive features. These performances serve as a vehicle for not just passing down customs and fostering a sense of pride in Gamo heritage, but also as a kind of entertainment (Moges, 2021). In addition, community members pray for health, prosperity, and unity as part of ceremonies to seek blessings for the upcoming year.

The cultural significance of Yo Maskela extends beyond mere celebration; it embodies the values of resilience, community, and continuity that define the Gamo nation. As the Gamo people navigate modern influences, preserving the essence of Yo Maskela becomes crucial for maintaining their cultural identity and promoting the intergenerational transmission of traditions.

The Yo Maskela celebration of the Gamo people is a profound expression of their cultural heritage, closely intertwined with their agricultural practices and social structures. The unique calendar calculation and the vibrant celebrations associated with the New Year highlight the importance of community, gratitude, and cultural continuity. As globalization impacts traditional practices, it is essential to document and celebrate such rich social expressions, ensuring their relevance for future generations.

h. The New Year Maskaro Celebration of the Kafecho Nation

The New Year celebration known as "Maskaro" holds immense cultural significance for the Kafecho people, an ethnic group sited in the Southern Nations, Nationalities, and Peoples' Region (SNNPR). This celebration reflects the Kafecho's agricultural traditions, communal values, and rich cultural heritage. The calculation of the year and the associated festivities are integral to understanding the cultural identity of the Kafecho people.

1. Calculation of the Year

The Kafecho calendar is primarily solar, consisting of 13 or 12 months of 30 days each and an additional month called "Dhuge," which typically has 5 days. This structure aligns with the agricultural cycle, marking significant agricultural periods such as planting and harvesting (Alemayehu, 2018). The New Year, Maskaro, is celebrated at the end of the previous month,

which generally occurs in September, signifying the end of the rainy season and the beginning of the harvest season.

The Kafecho people calculate their New Year based on a deep understanding of their environment and agricultural needs. The arrival of Maskaro is not just a time of marking another year; it symbolizes renewal, hope, and gratitude for the harvest. This timing is meaningful, as it reinforces the connection between the Kafecho community and their land, highlighting the importance of agriculture in their cultural identity (Kebede, 2020).

2. Maskaro Celebrations

Traditional music, dance, and communal dining are a few of the cultural events that define the Maskaro celebration. Locals share meals and include traditional fare like "injera" and other stews produced with crops farmed nearby (Feysel, 2019). The Kafecho people's celebration revolves around the custom of sharing food and strengthening their sense of belonging.

Traditional music and dance play a vital role during Maskaro. Performances often depict historical narratives, agricultural practices, and the daily life of the Kafecho people, serving as both entertainment and a means of preserving cultural heritage (Biruk, 2021). The dances are typically accompanied by local musical instruments, creating an atmosphere of joy and celebration that reflects the community's values and identity.

Rituals during Maskaro include prayers and offerings to ancestors and spirits, seeking blessings for the new year. These practices highlight the Kafecho's deep spiritual beliefs and respect for nature and ancestral heritage (Mekonnen, 2022). The celebration serves as a reminder of the connections between the past, present, and future, emphasizing the importance of community, continuity, and resilience.

The Maskaro celebration of the Kafecho people is a rich tapestry of cultural expression, deeply intertwined with their agricultural practices and community values. The unique calculation of the calendar year, alongside the vibrant celebrations, underscores the significance of gratitude, renewal, and cultural identity. To ensure that these events remain relevant and exciting for future generations, it is crucial to record and preserve them as modernization continues to impact traditional behaviors.

i. The New Year Bala Kadabe Celebration of the Gidicheo Nation

The New Year celebration known as Bala Kadabe is a central cultural event for the Gidicheo people, an ethnic group residing in Ethiopia's southern regions. Bala Kadabe is not merely a marker of time but a multifaceted celebration that embodies the Gidicheo people's agricultural, spiritual, and communal practices. The calculation of the year and the customs associated with the Bala Kadabe festival reflect the Gidicheo nation's deep connection to its environment and unique cultural calendar.

1. Calculation of the Year

The Gidicheo people follow a lunisolar calendar, similar to other indigenous Ethiopian groups, where both the moon and the sun are used to determine the months and seasons. Their calendar consists of 12 months, with a 13th intercalary month added periodically to keep the calendar in alignment with the agricultural and seasonal cycles. Each of the 12 months usually has 30 days, and the intercalary month contains 5 to 6 days (Tadesse, 2019). This method of timekeeping allows the Gidicheo people to synchronize their agricultural activities

with the climatic conditions, ensuring that the New Year begins after the rainy season and in anticipation of the harvest season.

A farming cycle comes to a close and a new one begins with the Bala Kadabe celebration. It is observed in late September or early October, coinciding with the start of harvest season. This year's celebration of the new year is noteworthy because it illustrates how the community depends on the land and the rain for their subsistence. The New Year always starts when the community is most optimistic and ready for the upcoming harvest thanks to the meticulous year-long calculation based on agricultural cycles and astronomical movements (Abebe, 2020).

2. Bala Kadabe Celebrations

The Bala Kadabe festival is a vibrant cultural event marked by communal rituals, feasting, and traditional music and dance. The Gidicheo people gather to pray for the future year's prosperity and to express gratitude for the harvest. The festival serves as a time for communal reflection, where families and communities reconnect after a year of hard work, reaffirming their bonds through shared meals and social activities.

Bala Kadabe is incomplete without feasting, with meals frequently made using just-harvested produce. This custom represents thankfulness for the bounty of the Earth and rebirth rather than just being a food festival. The Gidicheo people's connection to the Earth and one another is strengthened by sharing food with their community (Mengistu, 2021).

The centerpieces of the Bala Kadabe celebrations are traditional dance and song. The Gidicheo people play songs that have been passed down through the years using native instruments like drums and flutes. These performances transmit history and values through culture; they are more than just entertainment. The Gidicheo people convey their aspirations and hopes for the upcoming farming cycle through music and dance while celebrating their cultural legacy (Beyene, 2022).

The Bala Kadabe rites also include offerings, sacrifices, and prayers to ancestor spirits and deities. The Gidicheo people believe that their ancestors influenced both the success of their crops and the well-being of society. People bring food, drink, and symbolic objects to commemorate these spirits and pray for their blessings for the following year (Kebede, 2021). The Gidicheo nation's Bala Kadabe New Year festival is a group's close ties to community values, spirituality, and agriculture. The lunisolar calendar's year-calculation method harmonizes the celebration with the cycles of nature, guaranteeing that the festivities are prepared to enjoy the fruits of their labor. Bala Kadabe is not only a time marker but also a symbol of rebirth and unity because of the festival's diverse customs, which include eating, music, dancing, and spiritual ceremonies. These practices help to strengthen the Gidicheo people's cultural identity and communal relationships.

j. The New Year Hebo Celebration of the Yeme Nation

The New Year celebration known as "Hebo" is a pivotal cultural event for the Yeme people, an ethnic group residing in the Southern Nations, Nationalities, and Peoples' Region (SNNPR). This festival marks the beginning of a new farming year and provides an opportunity for community introspection, rebirth, and thankfulness. Understanding how the Yeme nation calculates the year and the customs surrounding Hebo delivers valuable insights into their cultural identity and social practices.

1. Calculation of the Year

The Yeme people utilize a lunisolar calendar that consists of 13 months. The first 12 months typically have 30 days each, while the final month, known as "Dhuge," includes an additional 5 days, bringing the total to approximately 365 days per year (Alemayehu, 2022). This calendar is intricately connected to the agricultural cycle, allowing the Yeme community to synchronize their farming activities with the seasonal changes in their environment. The New Year, Hebo, is celebrated at the end of September or the beginning of October, coinciding with the end of the rainy season and the start of the harvest period.

This timing underscores the agricultural reliance of the Yeme people, marking a transition from planting to harvesting. The Hebo celebration serves as a moment for expressing gratitude for the previous year's bounty while fostering hope for the upcoming agricultural season (Kebede, 2023).

2. Hebo Celebrations

The Hebo celebration is characterized by rich cultural practices, including communal feasting, music, and dance. Families and community members gather to share traditional meals that feature staple foods such as injera and several local dishes made from newly harvested crops. This communal sharing enhances social cohesion and strengthens bonds among community members (Beyene, 2021).

Music and dance play integral roles during the Hebo festivities. Traditional songs and dances are performed, often utilizing local instruments that resonate with the Yeme people's heritage. These artistic expressions serve as a medium for storytelling, reflecting the history and values of the Yeme nation (Mengistu, 2023). The vibrant atmosphere created by music and dance encourages active participation, making Hebo a significant communal event.

Hebo rituals frequently include prayers and offerings to ancestor spirits and deities to thank them for the previous year's blessings and to ask for their favor for the upcoming agricultural year. The Yeme people's strong ties to the land and their cultural traditions are highlighted by spiritual practices (Alemayehu, 2022). As a result, the festival provides an opportunity for group introspection, revitalization, and cultural identity assertion.

k. The New Year Dararo Celebration of the Gedo Nation

An important cultural occasion for the ethnic Gedo people, who live in the Southern Nations, Nationalities, and Peoples' Region (SNNPR), is the "Dararo" celebration, which marks the start of the year. This festival ushers in a new farming year and provides a chance for community building, introspection, and thankfulness for the year's gifts. The Gedo nation's method of calculating the year and the traditions surrounding Dararo can help one better understand their social ideals and cultural customs.

1. Calculation of the Year

The Geo people utilize a lunisolar calendar, which consists of 13 months. Each of the first 12 months contains 30 days, while the final month, known as "Dhuge," generally has 5 additional days, culminating in 365 days per year (Mohammed, 2023). This calendar is closely aligned with the agricultural cycle, allowing the Gedo community to plan their farming activities based on seasonal changes. The New Year, Dararo, is celebrated at the end of September or the beginning of October, coinciding with the end of the rainy season and the start of the harvest period.

This timing emphasizes the agricultural dependence of the Gedo people, as it marks a transition from the cultivation phase to the harvesting phase. The Dararo celebration serves as a moment for expressing gratitude for the past year's harvest and a hopeful reflection on the future (Abate, 2022). The community's reliance on agriculture is deeply rooted in their cultural identity, reinforcing the importance of shared experiences and communal ties.

2. Dararo Celebrations

The Dararo celebration is characterized by vibrant cultural practices, including communal feasting, music, and dance. Families and community members come together to share traditional meals including staple foods such as injera and various stews made from the recent harvest. This communal aspect of the celebration fosters unity and strengthens social bonds within the Gedo community (Hailu, 2021).

Music and dance play a vital role in the Dararo festivities. Traditional songs and dances, performed with local instruments, serve as expressions of joy and community pride. These performances reflect the Gedo people's history and values, functioning as a medium for storytelling and cultural transmission (Tadesse, 2021). The celebratory atmosphere encourages active participation, making it a significant communal event.

Prayers and offerings to ancestor spirits and deities are common rituals during Dararo, a time to express thanks for the previous year's benefits and ask for good fortune in the upcoming agricultural year. These spiritual practices reflect the Gedo people's deep connection to the land and respect for their traditional customs (Mohammed, 2023). This is an opportunity for collective reflection, rejuvenation, and confirmation of cultural identity.

3. The New Year Dongi Fuleta Celebration of the Donga Nation

An important cultural event for the ethnic Donga people living in the Southern Nations, Nationalities, and Peoples' Region (SNNPR), is the "Dongi Fuleta" celebration held at the start of the year. This festival heralds in a fresh crop year and provides a chance for social introspection, rebirth, and thanksgiving for the previous year's produce. The Donga nation's year-calculation system and the traditions surrounding Dongi Fuleta will help one better understand their social conventions and cultural identity.

4. Calculation of the Year

The Donga people utilize a lunisolar calendar comprising 13 months. The first 12 months typically consist of 30 days each, while the final month, referred to as "Dhuge," includes an additional 5 days, totaling approximately 365 days in a year (Yilma, 2023). This calendar is closely linked to the agricultural cycle, allowing the Donga community to plan their farming activities by seasonal changes. The New Year, Dongi Fuleta, is celebrated at the end of September or early October, coinciding with the end of the rainy season and the commencement of the harvest period.

This time highlights the Donga people's dependence on agriculture for their food and the value of their strong social bonds and common experiences. A chance to give thanks for the year's blessings and ask for good fortune for the upcoming farming year is presented by the Dongi Fuleta festival (Mekonnen, 2022).

5. Dongi Fuleta Celebrations

The Dongi Fuleta event is distinguished by an array of cultural customs, such as group dancing, singing, and feasting. During traditional dinners, which frequently include staples like

injera and different stews made from freshly picked crops, families and community members get together. Sharing food promotes harmony and fortifies social ties (Hailu, 2021).

The main components of the Dongi Fuleta celebrations are music and dance. The history, ideals, and goals of the Donga people are reflected in their traditional songs and dances. These performances reinforce cultural identity and continuity by presenting stories and frequently using traditional instruments (Abate, 2021). Dance and music foster a festive mood and invite social interaction and participation two crucial in celebration.

Rituals during Dongi Fuleta often include prayers and offerings to ancestral spirits and deities, expressing gratitude for the harvest, and seeking blessings for health, prosperity, and a successful agricultural year ahead. These spiritual practices highlight the Donga people's respect for their cultural heritage and connection to the land (Yilma, 2023). The celebration thus serves as a time for communal reflection, renewal, and the affirmation of cultural identity.

1. The Tembaro Nation's New Year Mesela Celebration

The Tembaro people, an ethnic group living in Ethiopia's Southern Nations, Nationalities, and Peoples' Region (SNNPR), hold a significant cultural celebration known as "Mesela" on the first day of the year. This event heralds in a fresh crop year and reflects the concepts of rebirth, camaraderie within the community, and thankfulness for the harvest. Gaining a greater comprehension of the Tembaro nation's year-calculation customs and Mesela traditions might provide important insights into their social customs and cultural identity.

1. Year Calculation

The Tembaro people follow a lunisolar calendar that consists of 13 months. The first 12 months contain 30 days each, while the final month, known as "Dhuge," typically has an additional 5 days, making the total year approximately 365 days (Tefera, 2023). This calendar is aligned with the agricultural cycle, reflecting the seasonal changes crucial for farming activities. The New Year, Mesela, is celebrated at the end of September or the beginning of October, coinciding with the cessation of the rainy season and the onset of the harvest period.

His timing underscores the Tembaro community's reliance on agriculture for sustenance and social cohesion. The Mesela celebration serves as a moment of gratitude for the past year's blessings and a hopeful reflection on the future (Mekonnen, 2022).

2. Mesela Celebrations

Cultural customs, such as group feasting, singing, and dancing, define the Mesela festival. To promote togetherness and strengthen social ties, community members gather to celebrate customary meals made with locally produced ingredients from the most recent harvest (Hailu, 2021). Main courses frequently feature staples like injera, a traditional flatbread, and different stews prepared from freshly grown vegetables and grains.

Music and dance are integral components of the Mesela festivities. Traditional songs and dances reflect the history and cultural values of the Tembaro people, serving as a medium for passing down stories and traditions (Abate, 2021). These performances are often accompanied by traditional instruments, creating a joyful atmosphere that embodies the spirit of celebration and community.

Rituals during Mesela typically involve prayers and offerings to ancestral spirits and deities, expressing gratitude for the harvest, and seeking blessings for health, prosperity, and

harmony in the coming year. These spiritual practices reinforce the people's respect for their cultural beliefs and deep connection to the land (Tefera, 2023). The celebration serves as a time for communal reflection, renewal, and reaffirmation of cultural identity.

m. The New Year Mesela Celebration of the Kembeta Nation

The New Year celebration known as "Mesela" is a significant cultural event for the Kembeta people, an ethnic group residing in the Southern Nations, Nationalities, and Peoples' Region (SNNPR). This celebration marks the transition to a new agricultural year, symbolizing renewal, community solidarity, and gratitude for the harvest. Understanding how the Kembeta nation calculates the year and the traditions surrounding Mesela provides valuable insights into their cultural identity and social practices.

1. Calculation of the Year

The Kembeta people utilize a lunisolar calendar consisting of 13 months. Each of the first 12 months typically contains 30 days, while the 13th month, known as "Dhuge," has an additional 5 days (Yilma, 2022). This calendar is closely tied to agricultural cycles, reflecting the seasonal changes that dictate farming activities and community life. The New Year, Mesela, is celebrated in late September or early October, coinciding with the end of the rainy season and the beginning of the harvest period.

The Kembeta community's reliance on agriculture for sustenance is shown by this period. The Mesela festival is a time to look forward to the future with hope and to reflect on the blessings (Mekonnen, 2021). Their calendar's cyclical pattern highlights the value of social bonds and common experiences thus, reflecting agricultural activities.

2. Mesela Celebrations

Numerous cultural customs, such as group feasting, music, and dance, define the Mesela celebration. Social ties are strengthened and solidarity is fostered when families and community members celebrate customary meals prepared from recently gathered crops (Tefera, 2023). Customary recipes frequently feature regional ingredients, highlighting the Kembeta people's rich agricultural legacy and cultural past.

Dance and music are essential components of the Mesela celebrations. The Kembeta community uses traditional songs and dances to communicate its values, history, and goals (Hailu, 2022). Traditional instruments are frequently used to accompany performances, evoking a happy and festive mood that captures the essence of the event.

Rituals during Mesela typically include prayers and offerings to ancestors and spiritual entities, expressing gratitude for the harvest, and seeking blessings for health, prosperity, and harmony in the coming year. These spiritual practices underscore the Kembeta people's respect for their cultural heritage and connection to the land (Yilma, 2022). The celebration serves as a time for communal reflection, renewal, and the affirmation of cultural identity.

n. The Gofa Nation's New Year Haze Maskela Celebration

An important cultural event for the Gofa people, an ethnic group living in Ethiopia's Southern Nations, Nationalities, and Peoples' Region (SNNPR), is the "Haze Maskela" New Year's celebration. This event is a time for community cohesion, cultural expression, and the reaffirmation of the Gofa identity thus, marking the beginning of a new farming year. Gaining knowledge about the Haze Maskela customs and the Gofa nation's method of calculating the year can provide important insights into their social customs and cultural legacy.

1. Calculation of the Year

The Gofa people have a lunisolar calendar with thirteen months in it. The first twelve months usually consist of thirty days each, with the thirteenth month, dubbed "Dhuge," having five extra days (Kebede, 2021). This calendar system, which designates critical times for crop planting, growth, and harvesting, is strongly linked to the region's agricultural cycles. Celebrated in late September or early October, Haze Maskela is the New Year that falls between the conclusion of the rainy season and the start of the harvest season.

The timing of Haze Maskela reflects the Gofa community's reliance on agriculture for sustenance. The celebration marks a period of renewal, gratitude, and hope for the future, symbolizing the plenty of the land and the community's connection to it (Tefera, 2020). This New Year celebration emphasizes the importance of communal ties and the shared experiences of the Gofa people as they transition from one agricultural cycle to another.

2. Haze Maskela Celebrations

Haze Maskela is distinguished by several customs, group dining, traditional music, and dance. People in the community celebrate the harvest by eating traditional meals prepared with foods that are produced locally (Yilma, 2022). This community element strengthens the Gofa people's cultural identity while promoting solidarity.

Dance and music are essential components of the Haze Maskela celebrations. As a means of cultural expression and preservation, performances frequently feature songs and dances that tell the tale of the Gofa people's history, values, and everyday lives (Mekonnen, 2021). These performances are accompanied by traditional instruments, which create a lively atmosphere that heightens the celebration and community involvement.

Rituals during Haze Maskela typically include prayers and offerings to ancestors and spiritual entities, expressing gratitude for the harvest, and seeking blessings for health and prosperity in the coming year. These practices highlight the Gofa people's deep respect for their cultural heritage and spiritual beliefs, reinforcing the connection between community, nature, and the divine (Kebede, 2021). The celebration thus serves as a time for reflection, communal bonding, and cultural reaffirmation.

o. The Boro Shineasha Nation's New Year Gari Waro Celebration

An important traditional occasion for the ethnic Boro Shineasha people, who live in the Southern Nations, Nationalities, and Peoples' Region (SNNPR), is the "Gari Waro" ceremony, which marks the start of the year. The agricultural way of life, social ideals, and cultural identity of the Boro Shineasha people are all embodied in this event. Gaining knowledge of how their year is calculated and the customs of Gari Waro might help one better understand the social customs and cultural legacy.

1. Calculation of the Year

The Boro Shineasha people utilize a lunisolar calendar, consisting of 13 months. Typically, the first 12 months have 30 days each, followed by a 13th month known as "Dhuge," which contains 5 days. This calendar structure is aligned with the agricultural cycles of the region, marking essential periods for planting and harvesting crops (Girma, 2020). The New Year, Gari Waro, is celebrated at the beginning of October, coinciding with the end of the rainy season and the onset of the harvest period.

The calculation of Gari Waro reflects Boro Shineasha's deep connection to agriculture and the environment. Celebrating the New Year at this time symbolizes renewal, gratitude for

the harvest, and hope for future prosperity. This timing underscores the community's reliance on the land for sustenance and their cultural identity tied to agricultural practices (Abdi, 2021).

2. Gari Waro Celebrations

Traditional music, dance, and communal feasting are a few of the cultural customs that define the Gari Waro celebration. The community is to eat traditional meals that are frequently prepared using just-harvested grains and vegetables (Tadele, 2022). Within the Boro Shineasha community, this communal part of the celebration reinforces social bonds and promotes solidarity.

The main components of the Gari Waro celebrations are music and dance. As a form of cultural expression and continuity, performances frequently tell the tale of the Boro Shineasha people's history, values, and experiences (Mekonnen, 2021). These performances are accompanied by traditional instruments, which foster a happy and welcoming environment.

Rituals during Gari Waro typically include prayers and offerings to ancestors and spirits, seeking blessings for health, prosperity, and good fortune in the upcoming year. These practices emphasize the spiritual beliefs of the Boro Shineasha people and their respect for their cultural heritage and the natural world (Girma, 2020). The celebration thus acts as a time for reflection, gratitude, and reaffirmation of cultural identity.

p. The New Year Zeyise Celebration of the Yewa Sureke Nation

The celebration of the New Year A vital component of the Zeyise people's cultural legacy, Yewa Sureke represents rebirth, community cohesion, and the start of a fresh farming cycle. The Zeyise nation, like many other indigenous Ethiopian communities, has created a calendar system that is in sync with agricultural operations and natural cycles. Yewa Sureke is a cultural time-marking event that includes social, farming, and spiritual aspects in addition to being a celebration.

1. Calculation of the Year

The Zeyise people keep track of time using a lunisolar calendar that combines the solar year and lunar phases. With this kind of timetable, Zeyise agricultural activities are in seasonal variations. According to Tadesse (2020), the Zeyise calendar comprises 12 months with 30 days each, plus 5 to 6 days added to the year as an intercalary period to correspond with the solar cycle. This schedule that significant farming and community gatherings, like the Yewa Sureke, happen at the best possible time just after the rains, right before the start of the new planting season.

The timing of Yewa Sureke is carefully calculated based on the harvest season, marking the transition from the rainy season to the beginning of the new agricultural year. Celebrated around September or early October, Yewa Sureke is a time of gratitude and renewal, reflecting the community's dependency on the rains for their crops. This period is considered ideal for the New Year celebration because it coincides with the end of the rainy season and the readiness of the land for planting (Kebede, 2021).

2. Significance of Yewa Sureke

For the Zeyise people, the Yewa Sureke event holds great symbolic meaning. It symbolizes the community's ties to the land, their ancestors, and one another in addition to the New Year. Because they believe that the blessings of their ancestors ensure a plentiful crop and a happy year to come, the Zeyise people celebrate the holiday as an occasion to

honor the spirits of their ancestors. During rituals, offerings of food, drink, and symbolic items are created and placed on altars or in holy areas as tokens of gratitude and devotion (Abebe, 2019).

Feeding, singing, and dance are essential components of the Yewa Sureke celebration and are ingrained in the Zeyise people's cultural heritage. The new crop is used to prepare communal feasts, signifying the blessings and abundance of the previous agricultural cycle. In a community, sharing meals strengthens the bonds of solidarity and support among members. Yewa Sureke features traditional music and dance that has been passed down through the years to protect the Zeyise people's cultural identity (Mengistu, 2021).

Music, particularly drumming and singing, plays a significant role in the festival, with specific songs dedicated to different aspects of the celebration. These performances are more than just entertainment; they convey cultural narratives and the historical significance of the festival, ensuring that the younger generation understands the importance of Yewa Sureke. The dances, which involve complex rhythmic patterns and group choreography, symbolize the harmony and unity of the Zeyise people (Beyene, 2020).

Plans and reflections from the community are essential components of the Yewa Sureke festival. The gathering of the Zeyise people with an opportunity to discuss matters of mutual concern. This is used to improve community welfare and organize the farming plan for the next season. Yewa Sureke's reflective element transforms the festival from a celebration into a platform for collective planning and decision-making (Tadesse, 2020).

3. Spiritual and Agricultural Connection

The Zeyise people's spiritual beliefs are closely tied to their agricultural practices. During Yewa Sureke, rituals are performed to seek the blessings of the gods and ancestors for the fertility of the land, rain, and protection from natural calamities. The offering of the first fruits of the harvest is a common ritual, symbolizing gratitude to the spiritual forces believed to influence the success of their crops (Kebede, 2021). These practices highlight the deeply intertwined relationship between spirituality and agriculture in the Zeyise culture.

q. The Hadiya Nation's Yahode New Year's Celebration

The Hadiya people of Ethiopia celebrate the start of a new year on their traditional calendar, known as the New Year Yahode celebration, a colorful cultural event. The Hadiya, an ethnic group predominantly found in the Southern Nations, Nationalities, and Peoples' Region (SNNPR), have a distinctive calendar calculation system ingrained in their historical and cultural backgrounds.

1. Calendar Calculation

The Hadiya calendar, known as the "Hadiya Gada," consists of 13 months, with 12 months having 30 days each and an additional month of 5 days. This structure closely resembles the ancient lunar calendars, which also incorporated lunar cycles into their timekeeping (Yilma, 2013). The year typically starts in September, coinciding with the end of the rainy season and the onset of the harvest period.

The calculation of the New Year is linked to agricultural cycles, emphasizing the importance of harvest and fertility in Hadiya culture. Traditionally, the New Year is celebrated on the first day of the month of "Yahode" (which translates to "New Year"), and it symbolizes renewal and the hope for a bountiful harvest (Mekonnen, 2020). The choice of this

period reflects the Hadiya people's close relationship with their land and agricultural practices, which have shaped their cultural identity and traditions.

2. Yahode Celebrations

Various cultural festivities, including communal feasts, traditional music, and dance mark yahode celebrations. Families gather to share meals, which typically consist of local dishes such as "injera" (a sourdough flatbread) and various stews made from locally sourced ingredients (Husen, 2022). Food sharing reinforces social bonds and communal solidarity theme during this celebration.

Additionally, during Yahode, the Hadiya people engage in rituals intended to bring blessings for the new year. These rituals often include prayers and offerings to ancestors and spirits, signifying respect for their lineage and the hope for protection and prosperity in the coming year (Gedefaw, 2021). The celebrations are a time marker and an expression of cultural identity and continuity, with traditional practices passed down through generations.

4.2 Noah's Dove And The Symbolism

The release of the dove, which occurs in the biblical narrative of Noah and the Great Flood contained in the Book of Genesis, is a potent symbol of hope, rebirth, and the coming of brighter times. Noah sends a dove to see if the floods have retreated and if life may start again after surviving months of flooding. According to Genesis 8:11, the dove's return with an olive leaf indicates that the floodwaters have subsided and dry land is beginning to emerge. This deed represents the possibility of a new beginning and the cessation of devastation. This story shares many similarities with the themes of New Year's celebrations, which stand for the end of hardships and the hope for a brighter future.

a. Biblical Symbolism and the Concept of Renewal

The dove's return with the olive leaf is among the Bible's most enduring symbols of peace and new beginnings. This biblical event can be interpreted as a reflection of humanity's innate desire to record the passing of time, recognize the difficulties of the previous year, and welcome the prospect of a better future in the setting of New Year's celebrations. Many cultures see the New Year as an opportunity to welcome new prospects and let go of old problems, much like Noah and his family did when they stepped off the ark to start life afresh following the deluge.

Additionally, sending the dove expresses optimism and faith in heavenly providence. Regardless of one's cultural or religious background, everyone enters the New Year with hope, much like Noah, who had faith that the waters would eventually subside and allow life to thrive once more. The olive leaf that the dove carried back was "the first sign of life returning to the Earth," according to Boadt (2012). This reflected God's covenant with humanity a promise that life would go on despite the tragedies experienced. Similarly, the New Year is a kind of covenant, a promise of renewal and a fresh start following the challenges of the previous year.

b. The New Year as a Season of Hope and Renewal

The olive branch in Noah's account denotes the end of the deluge and the start of a new chapter, New Year's celebrations are a universal symbol of life's movement between phases. Every festival, be it the Gregorian New Year, the Jewish Rosh Hashanah, or the Ethiopian Enkutatash, ushers in a season of introspection, rebirth, and hope for the future. To symbolize the atonement of previous transgressions and the expectation for a prosperous new

year, these festivities frequently incorporate rites and symbols of purification, such as lighting candles or bestowing water blessings.

The dove returning with an olive leaf can also be interpreted theologically as a symbol of peace and reconciliation, which are important aspects of New Year's celebrations. According to Brueggemann (2003), "The dove becomes an agent of peace, signaling not just the end of the flood but the restoration of God's order in the world." This symbolic restoration is comparable to the people for themselves and their communities during the New Year's Eve festivities when they try to bring their lives back into balance and reaffirm their dedication to peace, harmony, and advancement.

c. Theological Thoughts on Human Aspiration and Hope

The idea of divine grace can also be connected to the New Year's celebrations through Noah's account. Noah's release of the dove illustrates his faith that the floodwaters would eventually recede, indicating the start of divine mercy and the conclusion of divine judgment. In a similar spirit, New Year's festivities everywhere are infused with prayers for heavenly favors in the upcoming year. Many people make resolutions, offerings, or prayers at the beginning of the year to seek divine favor and align their lives with spiritual ideals.

People's anticipation as they start a new year, full of expectations for prosperity, happiness, and good health, is similar to the anticipation experienced while waiting for the dove to return. The concept that difficulties will pass and new possibilities will present themselves is associated with the beginning of a new year, just as the dove's return of the green leaf signified to Noah that the worst was behind him. A fundamental aspect of human existence, this sense of hope and regeneration is manifested in many ways throughout the New Year's festivities.

d. Noah's Story's Cultural and Religious Parallels

In many cultures, sending or receiving symbolic objects to signify rebirth or the end of adversity is a part of numerous New Year's customs. For instance, flowers are given as part of Ethiopian Enkutatah customs to commemorate the start of the growing season following the protracted wet season (Hassen, 2015). Similarly, the Jewish holiday of Rosh Hashanah ushers in a new year with customs like the blowing of the shofar, which stands for rebirth and optimism (Rich, 2018). These connections highlight how various religious and cultural traditions emphasize life's cyclical nature and the promise of brighter days, connected with the biblical account of Noah's dove.

In summary, the biblical narrative of Noah sending out the dove to find dry land is a profound metaphor for New Year celebrations. It encapsulates the human yearning for renewal, the hope that emerges after hardship, and the belief in a fresh start. Just as Noah trusted in God's plan and awaited the dove's return with hope, people around the world view the New Year as a time to leave behind past difficulties and look forward to a new chapter, filled with peace and prosperity.

4.3 The New Year Celebration across Ethiopian Nations and Nationalities

Ethiopia is home to a diverse range of ethnic groups and cultures, each with its unique customs and traditions. However, one common thread that runs through many of these communities is the celebration of the New Year in the month of Meskerem (September). While different ethnic groups refer to the New Year by various names, such as Enkutatah among the Amhara and Tigray, Irreecha among the Oromo, Gifata among the Welayta, and Fichee Chambalaalla among the Sidama, these celebrations all share a common spirit of

renewal, unity, and gratitude for the end of the rainy season and the beginning of a new cycle of life.

a. The Spirit of Unity through Diverse Celebrations

Despite the differences in terminology and specific cultural rituals, the Ethiopian New Year celebrations across different nations and nationalities embody a shared spirit of hope, renewal, and gratitude. These celebrations mark the end of the rainy season, a crucial time for agricultural communities in Ethiopia, and the start of the harvest season. As the country is predominantly agricultural, the New Year is seen as a time for giving thanks for the blessings of rain and fertile land. This gratitude is reflected in various forms, from the offering of flowers in the highlands to water blessings in the lowlands.

For instance, the Oromo Irreecha festival involves thanking the creator for the rains and praying for peace and prosperity in the new year (Hassen, 2015). Similarly, the Welayta people's Gifata celebration includes community gatherings to share blessings and give thanks for the harvest (Gebre, 2020). The Amhara and Tigray Enkutataash celebrations, while more influenced by Christian traditions, also involve feasting, singing, and thanking God for the year's blessings (Kaplan, 2007). These celebrations highlight the interconnectedness of agricultural life, spirituality, and communal unity across different Ethiopian cultures.

b. The Role of Astronomy in Ethiopian New Year Celebrations

Across these celebrations, the Ethiopian calendar plays a significant role in unifying the nation's diverse peoples. The calendar is based on solar and lunar observations and helps synchronize the New Year festivities across various communities (Eade, 2018). The month of Meskerem corresponds to the end of the rainy season and the transition toward the dry season is a significant marker for agricultural societies. Because of this adherence to natural cycles, Ethiopians can celebrate the New Year together as a nation, despite cultural differences.

The Ethiopian calendar itself is a symbol of the country's long-standing relationship with astronomy. The solar calendar, which diverges from the Gregorian calendar by approximately seven to eight years, reflects Ethiopia's ancient knowledge of celestial bodies and timekeeping. As Meskerem begins after the summer solstice and near the equinox, when the sun's position changes, it marks a new. This astronomical timing underscores the connection between Ethiopian spirituality, agriculture, and celestial events (Gebrehiwot, 2019).

c. Promoting Ethiopianism through Shared Celebrations

The shared celebration of the New Year in Meskerem has played a crucial role in fostering a sense of Ethiopianism an identity that transcends ethnic and cultural differences in favor of a united national identity. Though each ethnic group brings unique traditions and interpretations to the New Year celebration, the timing and purpose of the festivities serve as common ground. This shared celebration highlights the idea that, despite Ethiopia's ethnic diversity, there is a unifying thread in the country's cultural fabric.

The celebration of the New Year in September marks the end of one agricultural season the beginning of another and a moment of reflection on national unity. By celebrating together at the same time of year, the Ethiopian people reaffirm their shared heritage, values, and hopes for the future. The collective sense of renewal and hope that pervades these celebrations is crucial for promoting peace and togetherness in a country that has historically faced challenges related to ethnic and political divisions (Tafesse, 2019).

As Enkutatash, Irreecha, Gifata, Fichee Chambalaalla, and other celebrations bring together different groups, they also emphasize the importance of unity in diversity, which has been a cornerstone of Ethiopia's national identity. In recent years, there have been increasing efforts to celebrate these holidays as national events that bring together people from all backgrounds. The government has encouraged the promotion of Ethiopianism through cultural celebrations, seeing them as opportunities to build bridges across ethnic lines (Tafesse, 2019).

V. Conclusion

The study demonstrates that the New Year celebrations of Ethiopia's diverse ethnic groups, including the Oromo, Sidama, Gurage, Welayeta, Amhara, and Tigray, are deeply rooted in cultural traditions and astronomical observations. The universal themes of renewal and hope reflected in these celebrations are a powerful reminder of humanity's connection to the natural world and the cycles of time. Each group's unique way of marking the Ethiopian New Year, whether through agricultural cycles, ancestral reverence, or astronomical phenomena like the solar and lunar cycles, reflects a shared reverence for the passage of time and the start of new beginnings. The study also illustrates how these celebrations foster a sense of unity among Ethiopia's nations and nationalities, reinforcing a collective Ethiopian identity.

Furthermore, the study emphasizes how astronomical phenomena continue to influence cultural traditions, with the biblical account of Noah's dove serving as a symbolic link between historical accounts and contemporary customs. The findings emphasize how crucial it is to uphold these traditional customs to safeguard future generations' cultural ties to their past, fortify community ties, and preserve legacy.

The Ethiopian New Year celebrations, while diverse in their customs and names, share a common spirit of renewal, gratitude, and hope. Celebrated in Meskerem, these festivals are deeply rooted in cultural and agricultural traditions, with a strong reliance on the Ethiopian solar calendar. By observing the New Year simultaneously, Ethiopia's various nations and nationalities are brought together in a shared sense of purpose and identity. This unity in diversity underscores the role of the New Year as a symbol of Ethiopianism, helping to bridge ethnic and cultural divides in the pursuit of a common national vision.

Recommendations

Based on the findings of this research, the researchers recommend the following.

Programs for Cultural Preservation: To ensure that the traditions, astronomical knowledge, and rituals of Ethiopia's ethnic groups are passed down to future generations, local governments and cultural organizations should fund projects aimed at recording and conserving these celebrations.

Integration into parents : To help students grasp the profound relationship between customs and natural events, schools and other educational institutions should integrate Ethiopia's rich astronomical and cultural legacy into their curricula.

Promoting Unity: National efforts should be made to highlight the common themes and shared practices in the New Year celebrations of Ethiopia's different ethnic groups to promote a stronger sense of national unity.

Further Research: Scholars should conduct more in-depth studies on the specific astronomical calculations used by different Ethiopian communities, such as the Welayeta Gifata and Zeyise Yewa Sureke, to enrich the understanding of Ethiopia's indigenous timekeeping methods.

Cultural Tourism: The government should promote Ethiopia's New Year celebrations as part of cultural tourism, emphasizing the role of astronomy and unique social practices to attract international interest while supporting local economies.

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