

SIMPLE TECNOLOGY IN RURAL COMMUNITIES IN CHIWETEL EJIFOR THE BOY WHO HARNESSDED THE WIND (2019)

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Abstrak

Penelitian ini bertujuan untuk menganalisis representasi teknologi sederhana dalam komunitas pedesaan sebagaimana digambarkan dalam film The Boy Who Harnessed the Wind (2019) karya Chiwetel Ejiofor. Teknologi sederhana dipahami sebagai inovasi berbasis sumber daya lokal yang mudah dirakit, murah, dan relevan dengan kebutuhan masyarakat. Dengan menggunakan pendekatan kualitatif deskriptif serta kerangka Sosiologi Sastra Swingewood dan Laurenson, penelitian ini menelaah bagaimana fungsi, kelayakan, dan fleksibilitas teknologi divisualisasikan melalui pengalaman tokoh William Kamkwamba dalam menciptakan kincir angin dari barang-barang daur ulang. Data diperoleh melalui analisis dialog, visual, dan elemen audio film, serta literatur pendukung. Hasil penelitian menunjukkan bahwa teknologi sederhana dalam film tidak sekadar berfungsi sebagai alat mekanis, melainkan juga simbol kreativitas, ketahanan, dan solidaritas sosial. Kincir angin buatan William terbukti mampu menjawab kebutuhan mendesak masyarakat akan air, sekaligus memulihkan harapan dan kerjasama komunitas di tengah krisis lingkungan dan kemiskinan struktural. Selain itu, film ini menyoroti pentingnya pendidikan, ketekunan, dan pengetahuan lokal dalam mendorong inovasi berbasis masyarakat. Penelitian ini menyimpulkan bahwa teknologi sederhana memiliki peran vital dalam memberdayakan komunitas miskin, karena bersifat kontekstual, berkelanjutan, dan lahir dari kreativitas masyarakat sendiri. Temuan ini turut menegaskan bahwa representasi teknologi dalam film dapat menjadi sarana refleksi sosial serta inspirasi bagi pengembangan inovasi akar rumput di negara berkembang.

Kata Kunci: teknologi sederhana, komunitas pedesaan, film, inovasi lokal, Chiwetel Ejiofor

Abstract

This study aims to analyze the representation of simple technology in rural communities as depicted in Chiwetel Ejiofor's The Boy Who Harnessed the Wind (2019). Simple technology is defined as a locally sourced, low-cost, and practical form of innovation that can be constructed and maintained using basic materials and community knowledge. Employing a descriptive qualitative method and the Sociology of Literature framework by Swingewood and Laurenson, this research examines how functionality, feasibility, and flexibility of simple technology are portrayed through William Kamkwamba's efforts to build a windmill from recycled objects. Data were collected through analysis of film dialogue, visual imagery, audio elements, and supporting literature. The findings show that simple technology in the film functions not only as a mechanical tool but also as a symbol of creativity, resilience, and social solidarity. William's windmill provides a direct solution to water scarcity while restoring collective hope and cooperation in a community facing environmental crisis and structural poverty. The film also emphasizes the importance of education, persistence, and local knowledge in enabling community-driven innovation. This study concludes that simple technology plays a vital role in empowering marginalized rural communities because it is contextual, sustainable, and rooted in everyday problem-solving. Furthermore, the film demonstrates how cinematic representation of technology can serve as social reflection and inspire grassroots innovation in developing countries.

Keywords: simple technology, rural community, film analysis, local innovation, Chiwetel Ejiofor

1. INTRODUCTION

Simple technology refers to tools or innovations created using basic materials, local

knowledge, and practical skills to solve everyday problems. Unlike advanced technology, which requires complex machinery or large-scale production, simple technology is designed to be

affordable, accessible, and easy to maintain by local communities. These innovations often arise from necessity-from people finding creative ways to meet their needs despite limited resources. Examples include water pumps made from recycled materials, handmade wind made turbines, or solar-powered lamps made using basic components. According to (Largo Jiménez, 2024) such technologies empower individuals to become active problem-solvers within their own communities, reducing reliance on expensive external systems and promoting sustainable development. In developing regions, where poverty and limited infrastructure often limit access to modern tools, simple technology plays a crucial role in improving quality of life. Simple technology not only addresses practical problems such as water and electricity scarcity but also strengthens local self-reliance, creativity, and resilience in the face of adversity.

Chiwetel Ejiofor's film *The Boy Who Harnessed the Wind*, based on the memoir of William Kamkwamba, dramatizes the real-life story of a Malawian boy who uses simple engineering skills to build a windmill that generates electricity and pumps water for irrigation. Set in a community plagued by famine and political neglect, the film illustrates the struggle of rural populations to survive with limited resources while simultaneously capturing the ingenuity of local knowledge. Academic reviews emphasize the film's value in educational settings, using William's story to foster discussions about resilience, ambition, and the universality of childhood experiences. The story's relatability and the protagonist's determination provide a platform for reflection on overcoming adversity and the transformative potential of grassroots innovation (Kamkwamba & Dement, 2012). Ejiofor's direction emphasizes how technology does not always have to be complex or expensive to bring meaningful change, rather, its effectiveness often lies in its accessibility and relevance to the needs of

ordinary people. The film also explores the cultural and social challenges William faces, including skepticism from family members and villagers who doubt the feasibility of his idea. By grounding innovation in a rural African context, Ejiofor demonstrates how small-scale inventions can bridge the gap between survival and development.

Other cinematic works have addressed similar issues surrounding the relationship between technology and marginalized communities. For instance, (Zhang et al., 2021) highlights how a simple board game like chess empowers a Ugandan girl to transcend poverty, while documentaries such as *Solar Mamas* (2012) showcase how women in rural areas acquire practical skills to bring electricity to their villages through solar technology. These narratives collectively emphasize that sustainable progress in developing regions often relies on grassroots-level innovations rather than imported high-tech solutions. Grassroots innovations like community solar projects or participatory filmmaking foster social mobilization, community empowerment, and inclusion. These innovations enable marginalized groups to become active agents of change, challenge traditional power dynamics, and build resilience (Joshi & Yenneti, 2020). These solutions are often more effective and sustainable than top-down, imported technologies, as they are tailored to the community's needs and context (Pansera & Sarkar, 2016). Though its realistic portrayal of William's perseverance, *The Boy Who Harnessed the Wind* not only tells an inspiring personal story but also raises broader question about the role of simple technology in addressing systematic issues of poverty, inequality, and environmental crisis.(Chirwa & Chiwaula, 2022)

Given the significance of these themes, Ejiofor's film presents an important subject for academic inquiry. While much research on technology focuses on industrialized societies and cutting-edge innovation, there remains a gap

in analyzing how films depict the power of simple, locally adapted technologies in transforming rural communities. This study seeks to address that gap by examining the representation of simple technology in *The Boy Who* (Apostolopoulou et al., 2022), with particular attention to how it is portrayed as both a survival tool and a symbol of creativity, resilience, and social change. By doing so, this research contributes to broader discussions in literature and cultural studies about the intersection of technology, community, and human development.

2. LITERATURE REVIEW

This study employs the Sociology of Literature framework developed by (Mallick et al., 2025), which posits that literary and cinematic works are inherently shaped by the social structures, cultural values, and ideological forces of their time. Through its three dimensions author sociology, societal sociology, and audience sociology the framework reveals how a work both reflects and critiques social reality. In *The Boy Who Harnessed the Wind*, author sociology is visible through Chiwetel Ejiofor's background and artistic vision, shaped by his Nigerian heritage and global filmmaking experience, which inform his sensitivity to themes of poverty, education, and resilience. From the societal dimension, the film depicts rural Malawian life marked by hunger, political neglect, and structural inequality, while highlighting local creativity as a form of resistance. Audience sociology is reflected in the diverse ways global viewers interpret the film, with Western audiences gaining broader awareness of African rural struggles and African viewers recognizing lived experiences within the narrative. Altogether, this framework positions the film as a social document that exposes systemic injustices while offering a vision of community-driven transformation (Baihaq, 2023).

The second theoretical foundation of this study is the concept of simple technology, which refers to basic tools or innovations that can be created, utilized, and maintained using locally available resources. Unlike complex modern technologies, simple technology prioritizes practicality, accessibility, and the capacity to address everyday needs effectively. (Leonhardt et al., 2021) emphasizes that the value of a technology lies not in its sophistication but in its usefulness and relevance to the community's circumstances. To analyze its application, simple technology can be understood through three aspects: functionality, which concerns meeting essential needs such as energy and food; feasibility, which highlights affordability, accessibility, and ease of construction; and flexibility, which underscores adaptability to social, cultural, and environmental contexts. In the film, William's windmill exemplifies simple technology as a sustainable and community-rooted innovation that emerges from scarcity. Integrating this concept with the Sociology of Literature framework strengthens the analysis by showing how the film represents rural life, critiques social inequality, and portrays technology as a means through which marginalized communities assert agency and resilience.(Bjornlund et al., 2025)

3. METHOD

This study employs a qualitative descriptive approach grounded in literary and sociological analysis, treating *The Boy Who Harnessed the Wind* (Kamkwamba & Dement, 2012) as a cultural and narrative text that reflects social realities and the role of simple technology in rural life. The research examines the film as the material object, while the representation of simple technology and its function within rural communities serves as the formal object, and the thematic portrayal of creativity, resilience, and survival becomes the primary subject of analysis. (Schmitz, 1995) Data were obtained from the

film's dialogue, visual imagery, and audio elements, complemented by secondary sources such as books, journal articles, and related research. Data collection was conducted through textual note-taking of the script and character interactions, visual documentation of key scenes through screenshots, and auditory interpretation of background sounds, music, and emotional cues. (Zhang et al., 2021) All data were analyzed using a context-oriented qualitative method that integrates the film's narrative structure, character development, setting, and thematic elements with broader cultural and sociological frameworks. Through this method, the study interprets the film as both a literary representation and a social commentary, revealing how simple technology is constructed as a symbol of ingenuity and resistance within marginalized rural communities.

4. RESULTS AND DISCUSSION



This shows the first stage of functional technology as an idea to solve real problems. William realizes that technology can work effectively even with simple materials, as long as it is applied with understanding and purpose.

- William's first Experiment

After being forced to leave school, William searches for materials such as a bicycle and dynamo from the junkyard. He begins to build a small model of the windmill with help from his friend Gilbert.

01:19:35

Gilbert: "Do you really think this will work?
William : "We have to try."



This scene represents the experimental side of functionality testing, failing, and learning. William's persistence reflects that the function of technology also lies in the process of creation, not only in the final success.

- The windmill finally work

When the windmill spins and the pump starts working, water flows from the ground, and the villagers celebrate.

01:40:06 (No direct dialogue, only cheering and music in the background)



This moment highlights the main function of technology producing real results that improve people's lives. The windmill successfully turns natural wind power into water supply, symbolizing life and hope.

- The impact of Technology on society

After the windmill works, the villagers begin to plan again and regain hope. William's father, once doubtful, looks at the windmill proudly.

01:41:27



This shows that the function of technology goes beyond machinery; it creates social and emotional change by restoring unity and optimism in the community.

Feasibility

William collects scrap Materials

William goes to a junkyard to find reusable materials like old wires, a broken dynamo, and scrap metal

00:28:11

Dialogue:

Friend: "What are you looking for in this trash, William?"

William: "Something that can bring back the light."

Friend: "From this junk?"

William: "Yes. It's all I have."



This scene shows that the windmill is feasible because it uses materials found locally and at no cost. The idea proves that useful technology can start from recycled objects available in the environment.

William removes parts of the bicycle to build the generator

William asks his father to use their only bicycle as part of the generator. Although his father hesitates, he finally agrees after seeing William's determination.

Dialogue:

William: "Please, Papa, I need the bicycle to make it work."

Trywell: "That bicycle is our life, William. Without it, we can't go anywhere."

William: "If this works, we won't need to go anywhere to find water. The water will come to us."

1:22:36



This moment demonstrates both social and technical feasibility. A bicycle is a simple, accessible tool that anyone can find, making the invention possible even in poor conditions.

William and his friends build the windmill using simple, improvised tools

William and his friends build the windmill using wood, bolts, and metal scraps. They rely only on hammers, saws, and ropes no machines or workshops.

Dialogue:

Friend: "Are you sure this will stand, William?"

William: "It has to. The wind will help us."

Friend: "We don't even have the right tools."

William: "Then we'll make them work the best we can."

1:37:05



This shows that the technology can be applied anywhere, as it requires no special equipment or training. The process itself proves its practical feasibility.

The windmill works well even though it was built manually

When the windmill finally turns and pumps water, the entire village celebrates.

Dialogue:

Trywell: "It's moving! It's really moving!"

William: "Yes, Papa! It's working!"

(Water begins to pour from the pipe as people cheer.)

Villager: "He's done it! The boy has brought us water!"

1:40:46



This scene becomes the strongest evidence of feasibility. The device works perfectly even though it was made manually with limited materials proving that simple technology can bring real change.

Flexibility

William reading a book in the library about wind energy

In this scene, William begins to realize that his idea to save his village must be based on knowledge. He spends hours in the school library reading book about energy, electricity and how windmills work. However, the book describes theories using materials and tools that are impossible for him to obtain in his village.

Dialogue:

William: "It says the wind can make power... but we don't have those machines."

Librarian: "Maybe you don't need machines. Just understand how it works."

1:55:47



From this conversation, we can see how William starts to think flexibly. He doesn't just imitate the theory he reads but tries to adjust the concept of wind energy to the reality of his environment. His flexibility appears when he decides to use local materials and modify the tool according to what he has.

This scene emphasizes that knowledge is not only meant to be read but also to be translated and adapted to local contexts and limitations.

- William replaces the materials and shape of the blades to fit the local wind direction

As William begins to build his windmill, he faces many obstacles. One of them is the unstable wind direction in his village. His first blades are too heavy and fail to spin. He then replaces the materials with lighter wood taken from an old drum and adjusts the blade angles so that they can catch the wind more effectively.

1:19:59

Dialogue:

Gilbert: "It's lighter now."

William: "Yes. The wind will catch it easier this way."



This moment demonstrates practical adaptability. William doesn't cling to the original book design; instead, he modifies it to fit the local environment and the materials available.

This shows that flexibility in technology is not only about changing the structure but also about a mindset creative, open to change, and realistic when facing limitations.

The windmill ultimately works because he adapts its design to the specific natural conditions and resources in his community.

William modifies the tower's height to catch more wind

After successfully creating blades that spin properly, William realizes one more thing: the wind near the ground is too weak. He then decides to raise the height of the windmill tower to catch stronger winds above. With the help of his father and several villagers, he stacks wooden poles and builds a simple structure from available materials.

1:37:05

Dialogue:

Trywell: "Are you sure it's safe up there?"

William: "It has to be higher, Papa. That's where the wind is strongest."



This modification shows flexibility in applying technology. William does not follow the ideal design shown in the book; instead, he adapts the tower's height and materials based on the real conditions he observes. It proves his ability to combine logic, creativity, and environmental understanding to make his invention work. This flexibility highlights human adaptability how a person can transform a theoretical idea into a practical solution through observation and improvisation.

Simple Technology illustrate in Chiwetel Ejiofor's in The Boy Who Harnessed the Wind (2019)

Simplicity

William using a bicycle dyamo to produce electricity

In this scene, William discovers that he can generate power using the dynamo from a broken bicycle. Instead of looking for complicated machines, he focuses on what he already has. He attaches the dynamo to a small fan to see if it can move.

1:19:06

Dialogue:

William: "If this can make light from the bike, maybe it can make power for the pump."

Gilbert: "You think this small thing can water the fields?"

William: "Maybe. If we make it bigger."



This shows that simplicity in technology lies in the way William turns small, everyday objects into tools with new functions. The film presents this not as childish imagination, but as practical intelligence making the most out of what's available.

- Building the windmill with basic hand tools

When William and his friends start building the windmill, they use very basic tools: hammers, saws, and ropes. There is no use of machines or modern construction equipment. They rely on teamwork and patience.

1:37:11



This moment represents simplicity in execution. The process is slow and difficult, but every step is done with purpose and understanding. It reminds the audience that technology is not always about sophistication sometimes, its strength comes from how easy it is to build, maintain, and repair.

The windmill finally turns and pumps water

When the windmill starts to spin and the water finally flows from the pump, the entire village celebrates. It is a simple system wind, blades, and a pump yet it changes everyone's life.

1:40:46

Dialogue:

Trywell: "It's working... the water's coming out!"

William: "We can plant again!"



This shows that the power of simple technology lies in its impact, not its complexity. What matters is that it works and brings hope to the people. The simplicity of William's invention becomes a symbol of self-reliance and community strength

Creativity

William searching the junkyard for parts

William spends time in a local junkyard, collecting broken electronics and scrap metal. His creativity shines when he looks at useless objects and imagines new functions for them.

17:41

Dialogue:

Gilbert: "These are all trash."

William: "Not if we make them work again."



This scene captures the essence of creativity seeing potential in what others ignore. His innovation begins not with access to technology, but with his ability to think differently.

- Combining knowledge from books with real-life experiments William learns theoretical concepts about wind energy from books, but he doesn't stop there. He tests, fails, and experiments repeatedly until he finds what works. His creativity lies in turning abstract knowledge into concrete action.

00:55:35



Through this process, the audience learns that creativity is not about imagination alone it's about persistence, curiosity, and the courage to try again after failure

- The final windmill as a product of creative problem-solving

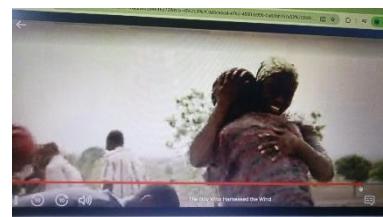
When the windmill finally works, it represents not just success, but the result of countless creative decisions: using a bicycle chain for the generator, light wood for blades, and rope for structure.

1:41:14

Dialogue:

Trywell: "You really did it, son."

William: "We all did."



This moment emphasizes collective creativity not one person's genius, but a shared effort built from imagination, teamwork, and local knowledge.

Context

The village suffering from drought

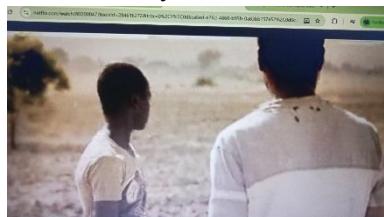
Early in the film, the camera shows dry land, dying crops, and people struggling to find food. This is the context that motivates William to act. Without this crisis, his invention would not have existed.

00:38:46

Dialogue:

Trywell: “The soil is dead, William. There’s nothing left.”

William: “Then maybe the wind can help us.”



This shows that the film treats technology not as a luxury, but as a response to social needs. It is born from the urgency of survival.

- The windmill’s impact on the community

When the water finally flows and crops begin to grow again, the film shows how one simple technology transforms the lives of many. The villagers regain hope, children laugh, and families start planting again.

1:40:41



This illustrates that technology gains meaning only when it fits the social and environmental context of its users. It becomes part of their life, not separate from it

Simple technology addressed in The Boy Who Harnessed the Wind (2019)

Purpose

William Sees the Dry Fields and Dead Crops

In the early scenes, the camera shows the barren land, cracked soil, and dying plants. The drought leaves the villagers in despair and hunger.

00:38:46

Trywell: “There’s nothing left to harvest.”

William: (quietly looking at the field)



This moment establishes the foundation of purpose the motivation to survive. William’s invention is born out of necessity, not ambition. The film highlights that simple technology begins when people confront real challenges and search for practical solutions.

- William Reads the Book “Using Energy”

In the school library, William discovers a science book about energy and electricity. He learns how wind can generate power and imagines using it to help his village.

00:45:52



This scene reflects how knowledge leads to purpose. What William reads becomes the seed of an idea not for invention’s sake, but to solve a local problem. The purpose of technology here is deeply connected to education and awareness.

- “I Can Bring Water”

When William tells his father his plan to build windmill, his words carry hope and determination.

1:22:13

William: “I can bring water.”

Trywell: “How? You’re just a boy.”

William: “I’ll try.”



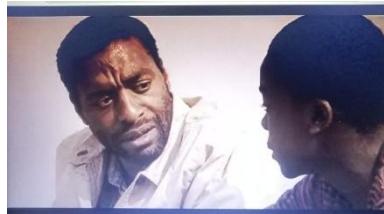
This short dialogue captures the emotional essence of purpose. For William, technology is not a dream or theory — it is an act of responsibility. The purpose is to help, to bring life back to the soil and dignity to his family.

- William and His Father Build the Windmill Together

After long conflict, Trywell finally helps William build the windmill. The process becomes a shared journey between father and son

1:36:18

Trywell: "We'll do it your way, son."



Here, the purpose of technology extends beyond survival it becomes a bridge between generations. The film suggests that innovation with a genuine purpose unites people; it strengthens family bonds and builds community spirit.

- The First Water Flows from the Pump

When the windmill starts to spin and the pump begins to push out water, everyone gathers around in disbelief and joy.

1:40:46

Villager: "It's working!"

William: (smiles silently, tears in his eyes)



This is the moment where the purpose of simple technology is fulfilled. The goal was never wealth or fame only to make the land live again. It proves that technology, even when simple, holds immense power when guided by purpose and perseverance.

Moral Values

Williams keeps studying despite being expelled

After being expelled from school because his parents cannot pay the fees, William still sneaks into the library to continue learning.

0:45:28

Librarian: "You're not allowed here, William."

William: "Please, I just want to read."



This scene illustrates William's strong will and curiosity. His persistence shows that moral values are not only about kindness but also about dedication to knowledge. The film suggests that education and effort are moral duties when faced with hardship.

- Williams Respects his father even when rejected

Trywell refuses to let William take the bicycle the only valuable item left in the family. Instead of rebelling, William tries to explain calmly.

1:23:05

William: "Please, Papa. Just trust me."

Trywell: "That bicycle is our life."



William's patience demonstrates respect and responsibility. He doesn't defy his father; he seeks understanding. The film conveys that moral integrity involves humility and persistence, not conflict.

Father and son work together again

After realizing William's determination, Trywell finally joins him in building the windmill.

1:36:18

Trywell: "Let's do it together."



This moment symbolizes reconciliation and teamwork. The moral value lies in mutual respect between generations showing that unity and forgiveness can turn conflict into strength.(Pilag Kakeu et al., 2024)

William refuses to give up after many failures

Before the windmill works, several attempts fail. The blades fall, the pump leaks, and the people lose hope but William keeps adjusting and rebuilding.

1:40:06

William: "We'll fix it again. It has to work."

This scene shows resilience and persistence. Failure becomes a moral lesson: that real success comes from patience, endurance, and the refusal to give up, even when the world doubts you.

1:40:06



The village unites when the windmill works

When water finally flows, the entire village celebrates.

1:40:47



This final scene reflects solidarity and social harmony. It reminds viewers that the ultimate moral value of technology is togetherness when people use knowledge to help one another and rebuild their community.

Social relevance

The village lacks water and food

Early in the film, scenes of dry soil, withered crops, and desperate farmers portray a severe drought in the village.

00:39:09



This opening scene sets a social and environmental background that represents the reality of many poor rural areas. The relevance lies in how environmental issues like drought directly affect people's survival. It reminds viewers that technology even the simplest can be a tool to confront social crises such as hunger and water scarcity.(Raphiri & Selelo, 2025)

The school lacks funding and facilities

William's school struggles financially; students sit on broken desks, and some drop out because their parents can't pay fees.

00:32:39

Headmaster: "If you can't pay, you can't attend classes."



This scene highlights educational inequality, a common issue in many developing countries. By showing this, the film connects technology to social justice in education emphasizing that innovation often starts with access to knowledge. William's story proves that intellectual curiosity can overcome economic limitations.

- Government refuses to help

When villagers gather to ask for food aid, they are rejected by government officers who promise nothing.

00:47:48

Government officer: "We will look into it.
Please go back to your homes."



This moment offers social criticism. It reflects the failure of institutions to support citizens in times of crisis. The film makes this neglect visible, showing why people must rely on themselves. William's invention later becomes a grassroots response a symbol of how ordinary citizens can create solutions when official systems fail them.

Villagers lose hope and turn desperate

As the drought worsens, some villagers begin stealing corn and livestock just to survive.

1:00:15

Trywell: "Hunger makes a man forget his own brother."



This scene represents moral decline caused by poverty. It shows how social conditions can shape behavior. The film uses this moment to underline that technological solutions like William's windmill are not only about machines they're about restoring dignity, stability, and humanity in times of despair.

William unites the villagers to build the windmill

After convincing his father, William gathers friends and neighbors to help him. Together, they lift poles, attach blades, and assemble the windmill.

1:37:11

William: "If we work together, we can make it."



This is the turning point where community collaboration becomes the heart of social relevance. The film presents technology as a collective effort that connects people. The windmill becomes not just William's success, but a shared symbol of hope and cooperation.

The windmill works and the village revives

When water finally flows from the pump, villagers cheer and begin to plant again.

1:40:47



This powerful image reflects social transformation through technology. The once-hopeless village becomes alive again. The relevance is clear real progress comes when technology directly improves people's lives, making it both socially and emotionally meaningful.

DISCUSSION

Based on these findings, the researchers found that the idea of simple technology is strongly represented in Chiwetel Ejiofor's film, *The Boy Who Harnessed the Wind* (2019). (Kamkwamba & Dement, 2012) The film tells the story of William Kamkwamba, a boy from Malawi who uses his creativity and knowledge to build a windmill from recycled materials such as bicycle dynamos, wood, and scrap metal. His innovation generates electricity and heats the air for his drought-stricken village. This narrative demonstrates that technology does not always rely on sophisticated equipment or modern industry, but can emerge from simple ideas,

perseverance, and community-based problem-solving.(Salemin et al., 2017)

The film's representation of simple technology emerges through several aspects: functionality, feasibility, and failure. Functionality is evident when William's windmill provides an immediate solution to the air crisis; feasibility is reflected in the use of inexpensive local materials; and survivability emerges when he adapts knowledge from books to suit the conditions of his rural environment. This third aspect reveals how simple technology can bridge the gap between knowledge and survival. (Rao et al., 2022)

According to Alan Swingewood and Diana Laurenson's sociological theory of literature, literature including film should be understood as both a reflection and a response to the social structures in which it emerges. In this regard, The Boy Who Harnessed the Wind represents the economic, cultural, and educational realities of Malawi. (Raphiri & Selelo, 2025) The film's social setting depicts a developing nation struggling with poverty, political instability, and environmental crisis. Ejiofor uses William's story to reflect the resilience of communities in the face of systemic inequality and environmental degradation.

From this sociological perspective, the film not only depicts the innovation of an individual but also comments on broader issues of social justice and educational access.(Ikhsan dwi primadoni, 2023) William's exclusion from school due to unpaid fees represents a structural barrier faced by many children in impoverished areas. However, his drive for self-study symbolizes resistance to these limitations. Through this depiction, Ejiofor demonstrates how knowledge and technology can empower communities and challenge the social conditions that perpetuate poverty.

The film's relevance extends beyond the Malawian context.(Apostolopoulou et al., 2022) It reflects conditions in many developing

countries, including Indonesia, where communities still rely on simple local technologies to address environmental and economic challenges. Its message is universal: innovation is not the privilege of the wealthy, but rather the right of everyone willing to learn and create. In this regard, The Boy Who Harnessed the Wind serves as a form of social commentary, aligning with Swingewood's idea that literature serves as an instrument of social awareness and change.

The film also presents a strong moral dimension. William's tenacity, his family's support, and the unity of his community demonstrate that technological success depends not only on mechanical skill but also on moral strength hope, cooperation, and responsibility. This demonstrates the inseparable human element of technological progress. The story teaches that empathy and collaboration are as important as technical knowledge in building sustainable innovation.

This study also positions itself among previous research on The Boy Who Harnessed the Wind. Previous research by Baihaq (2023) and Primadoni (2023) focused on the moral values and social conflicts depicted in the film. Meanwhile, this study offers a different contribution by emphasizing the representation of simple technology as a form of social reflection. While previous works have analyzed moral and emotional dimensions, this study explores how simple technology functions as both a symbol and a practical response to social problems.

These findings suggest that simple technology, as represented in film, has profound sociological significance. It reflects how communities in developing countries survive through creativity, rather than capital. This supports Swingewood and Laurenson's view that literary works are both products of social reality and tools for changing it.(Lopez, 2020)

In conclusion, The Boy Who Harnessed the Wind offers more than just an inspirational story;

it serves as both a reflection on social conditions and a call to action. The film reminds viewers that even the simplest forms of technology, when driven by knowledge and compassion, can transform lives. The film bridges art, science, and social responsibility, demonstrating that innovation rooted in humanitarian values can illuminate, both literally and metaphorically, the darkest corners of society.

5. CONCLUSION

This study's conclusions are based on an analysis of Chiwetel Ejiofor's film, *The Boy Who Harnessed the Wind* (2019), which focuses on the depiction of simple technology and its impact on rural communities. The study found that the simple technology depicted in the film is not only about mechanical inventions, but also about human creativity, problem – solving, and social cooperation. Through the character of William Kamkwamba, the film demonstrates that innovation can emerge from limited resources and traditional knowledge.

The windmill created by William becomes a central symbol of hope and change. This windmill illustrates how education, curiosity, and perseverance can help rural communities overcome poverty and natural challenges. The film also reflects the real- life social conditions in developing countries, where lack of access to technology and education often limits community growth. However, the story highlights that progress can begin with small, simple ideas developed by individuals who care about their environment.

In short, *The Boy Who Harnessed the Wind* conveys a powerful message that technology doesn't always have to be modern or expensive to make a difference. What matters is a willingness to learn, think critically, and use available resources wisely. The film reminds us that simple technology, when driven by hope and knowledge, can truly change lives.

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