

### FROM DEBRIS TO WEALTH?

## PARADOXES OF SUSTAINABILITY FROM INDIA'S BREADBASKET\*

[ENG] ¿De los residuos a la riqueza? Paradojas de la sostenibilidad en el granero de la India

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*Resumen:* El artículo traza un caso emblemático de la transición ecológica en el Sur: el intento de abandonar la práctica de la quema de rastrojos, o quema de residuos de cosechas, en la región del Punjab, «el granero de la India». Este procedimiento, utilizado tradicionalmente por los agricultores para preparar los campos para la siembra posterior, ha sido prohibido recientemente por el estado central indio debido a su impacto negativo en la contaminación atmosférica, la degradación del suelo y la salud pública. Se han puesto en marcha sistemas alternativos de gestión de residuos de cultivos (compostaje, incorporación al suelo como abono, reciclaje como pienso y uso en la producción de biogás). Sin embargo, la transición presenta retos considerables, especialmente para las comunidades locales, que a menudo se encuentran en situación de pobreza y luchan por adaptarse a las nuevas políticas agrícolas. Más allá de las acusaciones populistas de los medios de comunicación y de los actos legislativos represivos, el encuentro con los pequeños agricultores solicita una comprensión holística de las dinámicas socioeconómicas y culturales en juego en el Punjab, revelando las paradojas de la sostenibilidad y señalando un camino de transición ecológica más justo, pero aún por recorrer, que también puede aplicarse en otros contextos rurales, no sólo limitados, sino inspirados en las sabidurías restauradoras del sur de Asia.

*Palabras clave:* quema de residuos de cultivos; procedimientos agrícolas alternativos; Punjab; cambio climático; derechos de los campesinos.

*Abstract:* The article traces an emblematic case study of the ecological transition in the South: the attempt to abandon the practice of stubble burning, or the burning of crop residues, in the Punjab region, 'the granary of India'. This procedure, traditionally used by farmers to prepare fields for subsequent sowing, has recently been banned by the central Indian state due to its negative impact on air pollution, soil degradation, and public health. Alternative crop residue management systems (composting, incorporation into the soil as fertiliser, recycling as feed, and use in biogas production) have been initiated. However, the transition presents considerable challenges, especially for local communities, which are often in poverty and struggle to adapt to the new agricultural policies. Beyond populist media accusations and repressive legislation, the encounter with smallholder farmers calls for a holistic understanding of the socio-economic and cultural dynamics at work in Punjab, revealing the paradoxes of sustainability and pointing to a more just but still unexplored path of ecological transition that can also be applied in other rural contexts, not only limited but inspired by restorative wisdom in South Asia.

*Keywords*: stubble burning; alternative agricultural waste management; Punjab; climate change; farmers' rights.

<sup>\*</sup> The author declares no competition of interests in the pursuit of this publication, whose research was self-funded and benefited of extensive ethnographic engagement with the communities involved. Pseudonyms are used throughout in accordance with research ethics, and English was preferred so to grant a wider readership to South Asian participants.



#### 1. INTRODUCTION

"What is the relation between possibility and actuality or between actuality and eventuality, as one tries to find a medium to portray the relation between the critical events that shaped large historical questions and everyday life?".

So posited Veena Das (2007) in her preface to the book<sup>1</sup> that most deeply shook the understanding of the entanglement of environmental and sociocultural degradation for decades in South Asia. While this article investigates the yet-to-be-reached abandonment of a long seated agricultural practice in one the largest food fare plains of the world, now fiercely opposed seeing the urgency of climate protection policies and UN agendas for food security, an anthropological lens also demands to record and discuss other cultural beliefs and values shared among the local population. Although these may clash with dominant narratives, such words and experiences were an invaluable repertoire of witnesses and social actors who tried to contest or doubt a specific discourse on ecological transition: well-meant but perceived as a top-down imposition, with hazy contours and limited benefits.

In 2018 and 2019, along with extreme weather conditions as unfavorable as the exit polls for the ruling parties, the media hype that constructed Punjab, once the bread-basket of India, into a gas chamber for million inhabitants on the two sides of the Indo-Pakistani Border, very few newspapers cracked open the storyline: "*The Delhi-NCR government joins this dominant discourse of holding Punjab responsible for the entire crisis every year. It is called passing the buck to a sacrificial lamb*<sup>2</sup>." Two years later, after the Covid-19 pandemic had been somehow overcome, I was able to visit the region and travel through five of its iconic villages.

A widespread practice in South Asian agro-economics, particularly in India and Pakistan, *paddy burning* is often framed as an environmental alarm due to its significant contribution to air pollution and greenhouse gas emissions. However, when situated within the auspices of ecological transitions, this practice reveals deeper sociological tensions between traditional agricultural practices and emerging environmental concerns that are rooted in the history of Punjab's modes of sustenance. Paddy burning is not simply an act of environmental degradation; today, it reflects the precariousness of smallholder farmers caught between the demands of productivity, lack of technological alternatives, and state-driven modernization policies. This desired transition underscores the need for sustainable

<sup>&</sup>lt;sup>1</sup> DAS, V., *Life and Words: violence and the descent into the ordinary*, University of California Press 2007. <sup>2</sup> *Times of India*, 3<sup>rd</sup> Nov. 2019.



s among rural populations, while also

agricultural practices that do not exacerbate existing inequalities among rural populations, while also addressing the environmental imperatives of climate change and public health. As agricultural systems in South Asia evolve, socio-ecological transitions should focus on empowering farmers with green technologies and incentives that mitigate paddy burning's harmful effects. Framing the issue this way might provide a holistic understanding of the intersections between rural livelihoods, environmental justice, and policy responses in the face of climate change that go beyond the well-rehearsed narratives of international geopolitics and short-sighted policy-making, as these have appeared on headlines as much as in the state-of-art literature<sup>3</sup> on the subject.



1\_Picture by Divya Ribeiro, Indian graphic designer (2021)

# 2. POLITICAL MATTERS IN THE BREADBASKET OF INDIA

In early October, the rice paddy in Punjab's main districts was in the final stages of ripening. Fields rippled in various shades of green and golden-brown, the latter indicating crop that was almost ready to be harvested. The picturesque landscape belied a problem that the state had to grapple with soon after, and has then grappled with for years: the burning of stubble. After rice paddy is harvested in mid and late October, the fields are left with a stubble of stalks about two feet high: because the sowing cycle for wheat begins in late October, farmers have very little time to prepare their fields – so, they typically set fire to the stubble, and then clear the residue. The practice is rife in Punjab, and

<sup>&</sup>lt;sup>3</sup> JASANOFF, S., «A New Climate for Society», in *Theory, Culture & Society* 27.2-3 (2021), pp. 233–253; SHIVA, V., *Who Really Feeds the World? The Failures of Agribusiness and the Promise of Agroecology*, North Atlantic Books 2016.

the village of Sangrur, in particular, has since 2016 seen the highest number of stubble-burning events in the state every year - in 2021, there were over 8,000 such fires in the district.

Stubble burning has long been criticized for contributing to the immense air pollution of nearby areas, especially Delhi and the National Capital Region: several state governments of Punjab, as well as the Central government, have sought to tackle the problem through various means, ranging from outlawing stubble burning, to providing a one-time a year cash incentive to small and marginal farmers if they avoided burning stubble. But conversations with farmers, agricultural experts, and sellers of residue-management machines in five villages in the Sangrur district in early October 2022 indicated that these efforts had thus far met with limited success. In Punjab, paddy is harvested in mid and late October, while wheat is planted in late October. Because there is limited time between the two crops, farmers clear the fields by burning stubble.

The problem has been in a particularly sharp spotlight since 2013, when the Aam Aadmi Party-led government came to power in Delhi, and heavily criticized Punjab and other neighboring states for burning stubble and thus allegedly contributing to the capital's toxic pollution in the winter. In March 2022, the party won the Punjab state election with a landslide victory, after which its leader Bhagwant Mann, who was elected from the Sangrur constituency, took office as the chief minister. Understandably, its moves to tackle stubble burning are being closely watched. "*Who knows, maybe this year, Punjab's pollution might not reach Delhi!*" one farmer in the village of Longowal chuckled.

Several farmers whom I spoke with across the villages had adopted some of the solutions they had been offered for stubble burning, such as bio-decomposer capsules to break it down, but were unsatisfied with the results. Nearly every farmer had encountered awareness campaigns against the practice, but seemed to separate the public alarm on health<sup>4</sup> from their personal economic revenue. "There is no denying about the negative impacts of stubble burning. But it's not like we don't know the ill-effects of it," said Harjinder Singh, spokesman of Ekta Ahrun, a village Trade Union: "When we burn the stubble, before reaching Delhi, it impacts us, causing burning in eyes and shortness in breath. The burning also kills some friendly insects in the soil that are healthy for our crops. What will they teach us that we don't know already? We are desperate for alternative solutions to stubble burning that do not starve us".

<sup>&</sup>lt;sup>4</sup> SINGH, J., «Paddy and wheat stubble blazing in Haryana and Punjab states of India: A menace for environmental health», in *Environmental Quality Management* 28.2 (2018), pp. 47-53.



#### 3. LOOKING BACK AT PUNJAB'S AGRICULTURAL HISTORY IN THE XXC

The problem of stubble burning is closely tied in with Punjab's agricultural history. From the 1960s onwards, with the advent of the *Green Revolution*, the state saw an emphatic shift away from diverse crops like moong, groundnuts, jowar, maize and cotton, to a two-crop cycle of wheat and rice. While this brought relative prosperity to many farmers, it also gave rise to the large-scale challenge of managing paddy stubble. The Green Revolution included the wide distribution of "high yielding variety" seeds of wheat and rice, a high use of pesticides, and increase in the use of machines, such as tractors. By 1984-'85, Punjab used more high-yielding seeds and pesticides than any other state, and had the highest number of farming machines.

"Soon after the Green Revolution, at first the income for Punjab's best farmers definitely increased", said Harjinder Singh, as we sat in an air-conditioned room in his large home, with his family's cows mooing outside: heir of a Jat family who own of a rather large plot of land in the village. The shift was also accompanied though by a decline in other crops. "With the revolution, paddy dominated all the other crops our parents had grown traditionally," Harjinder Singh said. This dominance of rice, following wheat, is apparent in Sangrur, as in every other part of the state. As per the 2021 census, paddy was sown in 2.7 lakh hectares in the district, or 87% of the net sown area<sup>5</sup>, in the kharif season (cropping in late summer), and wheat was sown in 2.8 lakh hectares, or 92% of the net sown area, in the rabi season (cropping in fall).

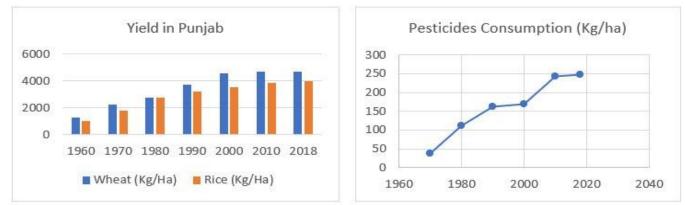
Once known as "India's breadbasket", the Punjabi floodplain underwent a chronic rural crisis in recent times, due to the unsustainable effects of the "Green Revolution" implemented in the 1960s under Prime Minister Indira Gandhi. After a bout of increases in grain productivity, this ruthless reform spoilt the environment heavily, as it drained soil fertility and escalated social conflicts, with joint households torn apart between land partitions and new modes of speculative production (Singh and Bhogal 2014). Haunted by small farmers' suicides who saw their ambitions dashing, much rural workforce abandoned agriculture going to swell the ranks of indentured labour and fuelling aspirations for mobility through regional urbanisation or transnational migration. The mechanisation of agriculture, introduction of high-yielding crops, increased use of irrigation and chemical fertilizers launched a new era for India to gain food self-sufficiency after decades of recurrent famines. However, by the 1980s, the effects of the Green Revolution showed irreversible soil degradation and dramatic

<sup>&</sup>lt;sup>5</sup> Net sown area refers to the "*total area sown with crops and orchards*"; a piece of land that grows more than one cycle of crop in a year is counted only once.



social conflicts over the reform of land property rights (which dispossessed very small landowners and increased social inequality throughout the villages).

As the cropping pattern changed, so did the demand for irrigation for the water-guzzling paddy crop. At the end of the 1960s, Punjab had about 1,500 tube wells per lakh hectare of gross cropped area<sup>6</sup>. This figure rose 566% by 1986, to more than 10,000 tube wells per lakh hectare. Even today, Sangrur's irrigation is largely dependent on tube wells. Unsurprisingly, then, soon after the 1980s, Punjab found itself facing a water crisis. To reduce the dependence on groundwater for irrigation, the state government passed the *Punjab Preservation of Subsoil Water Act* in 2009<sup>7</sup>. The law allowed paddy to be transplanted from nurseries to fields only after a date set by the government, typically in mid-June, after the onset of the monsoon – this was intended to ensure that farmers could rely to a significant extent on rain for irrigation, and did not draw more groundwater than was essential.



Source: Department of Agriculture, Government of Punjab

However, a 2021 study conducted at the Federal College of Agriculture indicated that despite the passage of this law, Punjab's groundwater continued to plummet as the area under paddy cultivation, as well as the number of electrified tubewells, increased. Further, the delaying of transplantation reduced the interval, a few months later, between the time paddy could be harvested and wheat seeds could be sown. Burning stubble then became a quick solution.

Many policy experts have advised a shift back to a situation where Punjab grew a diverse range of crops, as a long-term solution to the stubble problem. But LS Kurinji, a policy researcher with the think-tank Council on Environment, Energy, and Water, or CEEW, noted: *"If farmers are* 

 $<sup>^{6}</sup>$  The figure refers to the total area that is cultivated each year; a piece of land is counted as many times as it is sown.

<sup>&</sup>lt;sup>7</sup> The 2009 Punjab Preservation of Subsoil Water Act can be read online: https://indiankanoon.org/doc/88551401/



On top of that, for farmers, the biggest factor holding them back from diversifying is the lack of a minimum support price, or MSP, for other crops. An officer from Sangrur's Krishi Vigyan Kendra, who requested anonymity, observed that he saw little action towards diversification on the ground. "A lot farmers have shown interest in diversifying their crops," he said. "But the government is not procuring these crops at a large scale from them. So, even when the MSP is announced, these crops often get sold below it."

## 4. RECENT PROTESTS MOUNTING

# 4.1 From the battle for MSP Minimum Selling Price to a mass lobby intermezzo

Among the most conspicuous measures to tackle stubble burning, from 2018 onwards, the Central government offered farmers subsidizes to purchase machines to harvest the crop and clear the stubble. This was done under a scheme known as the *Promotion of Agricultural Mechanisation for In-Situ Management of Crop Residue*<sup>8</sup> in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi. This scheme offers a subsidy of 50% for various crop residue machines, such as the Super Straw Management System and the Happy Seeder. A farmer can either buy the equipment at full cost and get the subsidy in their bank accounts, or can buy the machine at the subsidized rate from the seller, in whose account the amount of subsidy is to be paid within a month of sale. Advertisements for these machines were plastered on billboards along highways across the Punjab throughout the fall season. One of the most publicized machines is the *rotovator*, which chops stubble into pieces before spreading it across the fields. This aims to ensure that the chopped stubble does not need burning, and that the fields can be ploughed in preparation of wheat.

<sup>&</sup>lt;sup>8</sup> A copy of the provision can be found here: https://www.agrimachinery.nic.in/Files/GuideLines/CRM.pdf





2\_Rotovator:to clear fields and replant crop (Ph. courtesy Vaishnavi Rathore)

Jagjit Singh, a farmer from Mehlan, decided to buy a second-hand rotavator: he used it once, and never again. "Soon after I ran the rotavator on the field, I was able to sow the wheat seeds," Jagjit Singh said. "But within 15 days, I noticed that the saplings of wheat had started to show damage from the pink bollworm." In paddy, this light-pink worm resides in the stalk of the crop, reproducing quickly, and damaging the grains and leaves. Since the stubble is left behind, although chopped and churned by the rotavator, some bollworms survive in it till the wheat crop is sown, which the worms then feast on. For smaller farmers like Jagjit Singh, such losses can be devastating: "This year, I plan to burn the stubble, so that in case there are any bollworms in the crop, they die with the fire. If the Government does not subsidize us, how else are we supposed to stay afloat?"

The 2020–2021 farmers' protests in Punjab and across northern India were driven by the passage of three agricultural reform laws by the Indian government. These laws, namely: Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, and the Essential Commodities (Amendment) Act, aimed to liberalize agricultural markets, enabling farmers to sell their produce directly to private players beyond the government-run Agricultural Produce Market Committees (APMCs). While the government argued these reforms would empower farmers by giving them more freedom and better prices, farmers, particularly in Punjab and Haryana, feared they would lose the safety net of the minimum support price system. The MSP ensured a guaranteed price for certain crops, providing stability in an otherwise volatile market. The perceived threat to this system led to



widespread dissent among farmers, many of whom felt that large corporations would benefit at their expense, further worsening their already precarious economic situation.

The protests, which began in late 2020, saw thousands of farmers camp out at the borders of Delhi for months, demanding a complete repeal of the laws. The farmers' movement became a symbol of resistance against neoliberal policies, raising concerns about the growing corporatization of agriculture and the potential marginalization of small-scale farmers. The protests also drew attention to deeper issues like agrarian distress, rising debt, and farmer suicides, bringing these socio-economic struggles into the national spotlight. After almost a year of protests, which garnered both national and international attention, the government eventually agreed to repeal the laws in November 2021. As Marxist scholars remarked, this outcome signified a rare victory for *grassroots mobilization*<sup>9</sup> against top-down policy reforms, reflecting the strength of collective action in Indian democracy.



3\_Punjabi farmers' strike in Feb.2021\_Ph. from The Hindu

## 4.2 Farmers' resistance to ecological transition in the fields

The last local government elected, the Aam Aadmi Party which launched itself as a breakthrough from the duopoly of the Congress and the BJP (sidelining Sikh parties usually dominant in the region), has yet to present a clear and comprehensive plan to tackle the problem of stubble burning. Proposals have been met with hurdles and shown limited effectiveness.

<sup>&</sup>lt;sup>9</sup> KUMAR, R., «The Agrarian Crisis and Farmers' Protests in India», in *Journal of Peasant Studies* 48.3 (2021), pp. 489-508.



Among the government's solutions was a cash incentive of 2,500 Rs per acre to farmers who did not burn stubble (the Central Government would bear 50% of this cost, and the rest would be split between Delhi and Punjab). Another idea is the use of PUSA bio decomposer capsules: cheap pods to be mixed with water along with chickpea flour and then sprinkled on the stubble. It is estimated to rid the field of the stubble in around 25 days. However, many farmers that I spoke with were either unaware of the capsule, or were skeptical about it after learning from their fellow farmers that it did not show the expected results. Nirmal Singh from Longowal was one such farmer, who experimented with it last year with help of the agricultural department, but told me that he would not be using it again this year. "We waited for 20 days, but did not see any difference in the stubble," he said.

Some villages have given up stubble burning as a result of strong political support from within. Between 2014 and 2019, the village of Kanoi made 80% of its farming land free of burning. "My younger brother was elected as the *sarpanch* (village chief), and for him, stopping the burning was a big agenda," explained Gurjinder Singh, a resident of Kanoi. The process saw a major turning point when Gurjinder Singh and his brother helped ensure that Kanoi was one of three villages that Punjab Agricultural University "adopted" under a project to reduce residue burning. "Through this, the university was constantly helping us arrange discussions with the farmers of our village," Gurjinder Singh added. "*People tend to listen to what the* panchayat *president says*."

But the man did not shy away from admitting the limitations of progress made as a result of specific individuals' agendas. From 80% of his fields being burning-free, the proportion plummeted down to about 30-35% now when his brother failed a second mandate. Additionally, in 2020, with many farmers participating in the farmers' protest in Delhi, they were pressured for time and chose to burn the stubble when they returned to work on fields. Gurjinder Singh has also helped others manage their stubble by lending them machines. In 2018, he bought a Happy Seeder for his family's use, and regularly lent it, along with tractors, to other residents who needed it. Over the years, nearly 20 other farmers in the village, who are relatively well off, have bought crop residue management machines. These farmers lend the machines to others for a small fee.

About 40 km eastward, in Hoshiarpur, farmers have been experimenting with another solution to stubble burning. They have been giving their stubble to Verbio India, a company that manufactures biogas and natural gas from agricultural residue, like stubble. Harsevak Singh gave his stubble to the company three years ago. "We cut the stubble and keep it, and the company sends their own machinery to first create bundles out of the scattered stubble, collect it and take it to the factory," Harsevak Singh said. But farmers also noted that they have not found the service reliable – one said



there were excessive delays in collection, another that they covered a limited area, yet another that the company did not collect stubble one year, saying that it had too much moisture. A Verbio representative explained that the company was currently in a trial phase.

For farmers, the problems with various proposed solutions to stubble management are discouraging, given that their work is riddled with other uncertainties also. In Mehlan village, farmers recounted that rains in September had flooded the rice paddy, and that a heatwave earlier in the year had damaged wheat yield. "We are investing a lot of inputs in farming, but our outputs are not being able to meet the costs," Chamkor Singh said, as he stood in his field. He plucked a piece of paddy stalk, then broke it into two, to reveal a pink bollworm: With unforeseen events, like the weather, not many of us can afford to take risks with curbing stubble burning too. We require support from the government in cash incentives, or making machines available. Otherwise we are done, just like this worm!

# 4.3. A new season for local environmental ethics

It is worth to remember that all religions autochthonous to the Indian Subcontinent have always averred to the attention of man for the nature s/he inhabits and should venerate or steward with any means. As an overview, on might recall that: 1.in Hinduism, the concept of *dharma* encompasses the duty to protect and preserve the environment; 2. Buddhism teaches principles of compassion, interconnectedness, and the avoidance of harm to living beings: and 3. Jainism places a strong emphasis on non-violence (*ahimsa*) and compassion towards all living beings. Besides, the peculiarity of Punjab as a vast fertile land, crossed by five long rivers stemming from the Himalayas (and tributaries to both the Indo and the Ganga), also gave birth to the newest of mass Monotheism in India: Sikhism. Sikh beliefs are intimately tuned to environmentalism. First, the Guru Granth Sahib, the holy scripture of Sikhism, contains passages advocating for environmental stewardship. Sikhism teaches *seva* (selfless service) and compassion, which can include responsibility towards environmental conservation. To actualize its tenets, on Guru Nanak's 550th Gurpurab (lit. birthdate), so commented the CM - Chief Minister of Punjab: "the Sikh Gurus revered air (*pawan*) as a teacher, water (*paani*) as a father, and land (*bharat*) as a mother. Shall the farmers follow their trail!"

Environmental consciousness then comprises not only the legacy of hoary moral traditions inscribed in the spirituality of Asia at large, but it also acknowledges more recent ethical postures, which build upon anti-globalist corporate finance and oppose the expropriation of one's land to the



advantage of transnational capital. Besides the hundred stakes already claimed in relation to the throng of paddy burning, in July 2024 at a @C40Cities<sup>10</sup> event, environmental activist Vandana Shiva (known for her *j'accuse<sup>11</sup>* to the aforementioned infamous *Green Revolution*) told why blaming Punjab's crop burning for city pollution might not be fair to farmers. So she spoke:

"...this frenzy is a diversion and it's not explaining why farmers in Punjab burn their crops. In India we all knew straw is a very important link between ourselves, our crops, the earth and our animals... Straw is used for recycling as organic matter but the chemical agriculture made short dwarf varieties to take up more chemicals so producing more greenhouse gases as synthetic fertilizers emissions. Besides, we've made the straw useless and the farmers were told then to burn the crop and haste natural cycles! But it's wrong to say that crop burning is the evil of air pollution: because farmers burn the crop in Punjab in November, the peak pollution of Delhi happens in December. So it's time to not turn our eye away from fossil fuels, away from the chemicals and criminalize the farmers... when in in fact Monsanto is trying to use the crop burning to impose the end of the rice cultivation [which was introduced as part of the Green Revolution in northern India] and to switch to hybrid corn! that's not what India needs, not what the Punjab needs for sustainability: organic farming and biodiversity..."

#### 5. CONCLUSIONS

Recapping the argument here put forth, *paddy burning* in South Asia, particularly in countries like India and Pakistan and across the vast plains of the Punjab region on both country sides along the infamous Border, can be framed as a sociological issue deeply intertwined with ongoing ecological transitions and rural livelihoods. As we have seen, this agricultural practice, where farmers burn crop residue after the rice harvest, is driven by socioeconomic pressures, such as tight planting schedules and inadequate machinery to manage stubble in eco-friendly ways. However, this widespread technique has profound ecological consequences, contributing to air pollution, climate change, and soil degradation.

As countries in South Asia navigate a steady demographic rise as well as crop crises with ensuing bio-social struggles, *paddy burning* represents the friction between traditional, cost-effective farming methods and the urgent need for environmental stewardship. These transitions are shaped by the interaction of policy reforms, technological innovations, and smallholder farmers' socioeconomic realities: for whom it's essential to provide viable alternatives, financial incentives, and education on sustainable practices that align with both their livelihood needs and broader ecological goals.

In short, if the much praised paradigm of *ecological transition* should shift toward a greener and more sustainable future, this intention might be pursued only when, and once, all the human

<sup>&</sup>lt;sup>10</sup> C40 is a global network of mayors of the world's leading cities that are united in action to confront the climate crisis. <sup>11</sup> SHIVA, V., *The Violence of the Green Revolution: Third World Agriculture, Ecology, and Politics*, University Press of Kentucky 2016.



actors (and their multiple stakes) who are primarily responsible for such environmental re-generation are taken into serious consideration: if their relation with the soil that ultimately feeds them (and other species) moves from a mind-set of economic growth to one of ecological alliance with the earth. As very convincingly argued<sup>12</sup>, there is no way to escape from the criticality of the environmental and social situation, yet only with a wider approach to the scenario a new vision for conservation and equality might surface. Going through a "systemic review of challenges and opportunities in sustainable stubble management in Punjab<sup>13</sup>" demands more than what has been done for too long.

Returning to the opening inspiration by Veena Das (2007), if the *words* that people use to describe their *life*, i.e. the surrounding world and their own placement within, were considered for the public good as more than salient quotes from the anthropologists, collective imagination could slowly but eventually shift into reality.

<sup>&</sup>lt;sup>12</sup> GOTTIPATI, R., BURRA, P. M., MENON, S., «Stubble burning: Root cause, impacts and its management in Indian scenario», in *Environment Conservation Journal* 22.3 (2021), pp. 37-45.

<sup>&</sup>lt;sup>13</sup> ANAND, S., KAUR, H., «Challenges and Opportunities in Sustainable Stubble Management in Punjab: A Review», in *International Journal of Environment and Climate Change* 14.3 (2024), pp. 274-297.