



Dainik Jagran

# Fields on Fire



Play campaign AV





# When Bryan Adams saw his own ghost!





Or, was it really?



# Meet the Ghost Creators





# Meet the Ghost Creators

Around the time of Adams' performance, 23mn farmers in neighboring states were burning agricultural stubble on 80,000sqkm, preparing their land for sowing.

**This stubble smoke- a lethal cocktail of particulate matter, carbon dioxide, nitrogen dioxide and Sulphur dioxide, hangs ominously over Delhi's air, likened by medics to smoking 50 cigarettes/day for its 20mn citizens!.**



**This is Delhi's tryst with environmental Armageddon.**





Half of Delhi's lung cancer patients are non-smokers.



Half it's 4.4mn school children have irreversibly stunted lung development

## Breathless.....Hopeless.....Helpless

World Bank says healthcare fees and productivity losses from pollution cost India 8.5% of GDP – over \$200bn/year

# But the farmers have no option to burning



## Little Time

They have a very short window of time — 20 days to clear their fields between harvesting Paddy and sowing rice.

## Little Choice

Crop harvesters leave a fair bit of paddy stubble on the field. Unsuitable for cattle fodder, it has to be removed.

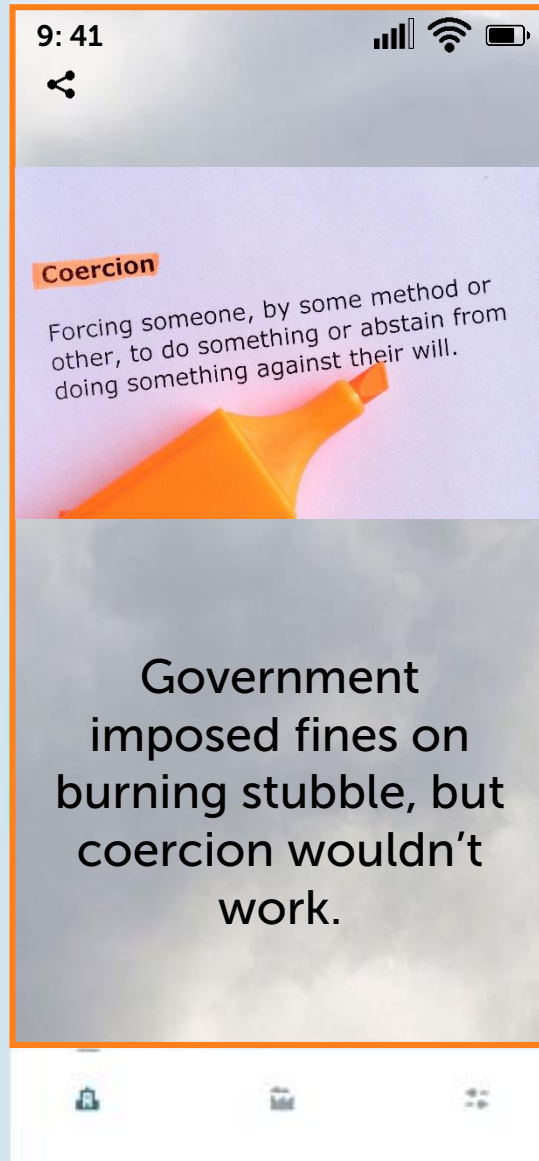
## Left with no option

But removing the stubble is an expensive task with machines costing 1000/hr and labour costing Rs 4000/hectare. A matchbox costs just Re 1 – the most economically “viable” option is burning the stubble.



**A Lopsided Government Policy**, ensured that procurement of rice and wheat is assured, and cash is quick. Paddy cultivation is thus incentivized. This gives little incentive to farmers, a majority of who are under high debt, to even think of crop diversification. Instead, farmers grow crops in rapid succession, burning the stubble to prepare fields quickly







# This was our Campaign

We will not burn crop residue....we'll save the environment



It isn't that the scientists and policymakers don't know what causes air pollution, or what it takes to tackle it. The problem is social and political as much as technological, and human problems are often harder to overcome than scientific ones.

## Campaign Objectives

### **Find Solutions**

Help farmers in  
clearing fields  
without burning

### **Environmental Consciousness**

Spread  
awareness on  
it's  
environmental  
impact

### **Set Policy agenda**

Set practice  
and policy  
agenda for  
Government

# Taking the message to Ground Zero

We sent **30 teams of experts** to **608 villages**. They conducted **196 live demonstrations** at farms





# A pledge to not burn crop residue

**7550 farmers and 693 village heads took a pledge** to not burn crop residue. **14590 farmers rented machines** to remove crop residue





# Cause Advocacy

**540 agents of change** became campaign ambassadors, who could potentially **take the campaign to 80,000 farmers**.





# Involving policymakers and specialists

**50 panel discussions** with experts and policymakers deliberating on methods of crop residue management. Discussions **attended by 1652 farmers.**





# Explaining the environmental impact

*45 rallies, 5 street plays and 21 Q&A sessions with experts conducted.*





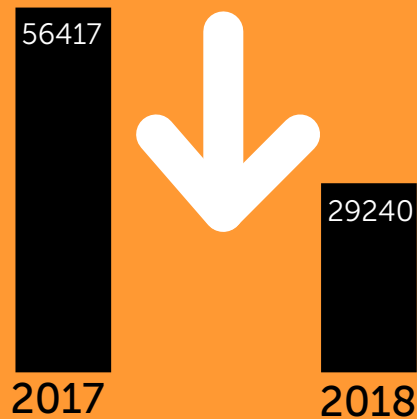




# Results

## Drop in Farm Fires by 48%

Farm fires dropped by 48%  
from 56417 fires in 2017 to  
29240 instances in 2018





# Results

89,916 hectares of fields  
were NOT set on Fire

Resulting in 5,55,231 tonnes of  
crop residue NOT BURNT –  
saving the environment from:

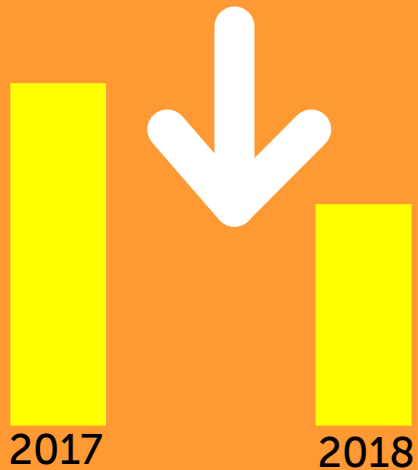
- 1666 tonnes of particulate matter,
- 110602 tonnes of Ash, and
- 33000 tonnes of Carbon monoxide.



# Results

## Improvement in Air Quality Index (AQI) by 35%

AQI improved in Punjab & Haryana from 309 last year to 200 this year





# Results

## Adding INR 57mn to Farmer Incomes

We added to farmer incomes by encouraging them to convert crop residue to manure, by enabling them to sell crop residue to factories, and as cattle fodder.



# Results

And, Delhi breathed easy

Air Quality Index in Delhi improved from 360.9 in Nov 2017 to 334.9 in Nov 2018



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