



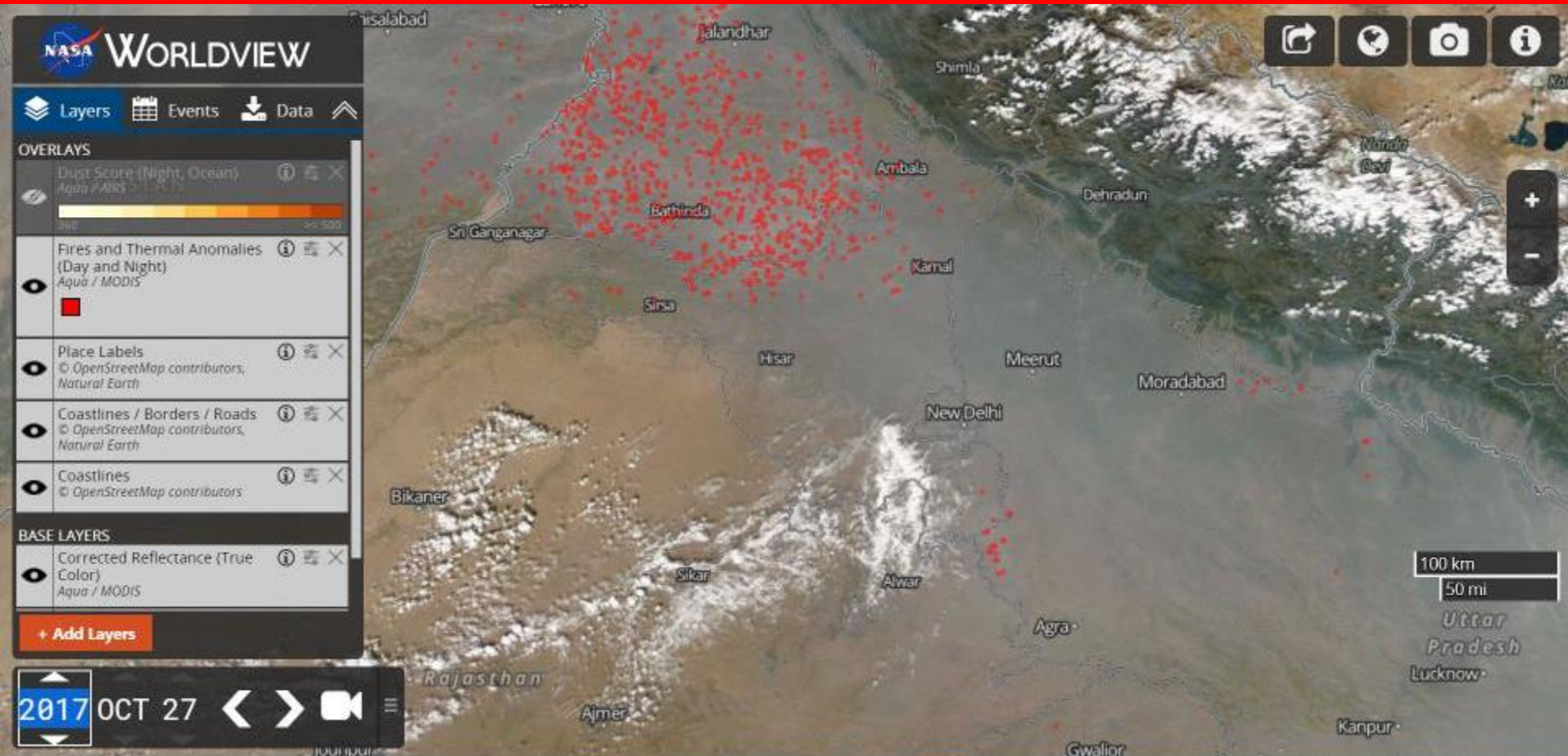
Dainik Jagran

Fields on Fire



Play Campaign Video

Every year, around the mid Oct-Nov period, Fires and Thermal anomalies are seen in North India especially around Delhi, and its neighboring states of Haryana and Punjab



This is due to farmers preparing their land for the sowing season. That preparation meant burning millions of tonnes of agricultural stubble

Thousands of such fires burn in a band more than 250 kilometres (150 miles) from east to west.



And as a result, this is how Delhi looks during a typical morning around this time of the year



#DelhiGasChamber was trending in India during Oct-Nov.



Air reached PM2.5 concentrations of 1,200 micrograms/cubic meter, 48 times WHO's guideline value

Hospitals reported a 20% surge in patients with pollution-related illnesses

The Indian Medical Association declared a public health emergency advising people to avoid going outdoors.

Schools were shut down.

Merely breathing was akin to smoking 50 cigarettes a day !!

Roads wore a dystopian look with pollution masks everywhere

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.

In Haryana, over 9 mn tonnes of stubble is burnt/yr

It Releases

13mn tonnes of CarbonDioxide

18000 tonnes of SuphurDioxide

550,000 tonnes of CarbonMonoxide,

27000 tonnes of Patriculate Matter

1800,000 tonnes of Ash



This heady cocktail blows over and hangs ominously over Delhi's air and felt in the lungs of its 20 mn citizens.

So, how do we douse the fires?



Challenge : The Free Rider effect

The cost incurred by not burning is borne by the farmer alone, while the benefits of not burning are shared by all.

Economists term this problem a free-rider effect. It makes action almost impossible, unless the person who enjoys the benefit bears the cost.



Challenge : Lopsided Government Policy

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



Knee jerk Reactions

The National Green Tribunal imposed a fine on burning stubble, but coercion would not work.

Moral arguments too won't work.

The farmer needed alternatives

At Dainik Jagran, we decided to intervene and change the equilibrium. It's a subject of behavioral economics to design a mindset change and changing practices, not one designed by a judicial or a bureaucratic approach

This was our Campaign

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



Campaign Objectives

Awareness

Spread awareness about the ill effects of stubble burning on soil fertility and environment

Alternatives

Suggest alternative measures

Incentives instead of Penalties

Impress upon the State Government to incentivize farmers for not burning stubble

A team of experts created awareness

80 experts and 86 members from our team visited 288 villages. They highlighted impact on environment and soil fertility, and suggested alternates. Village heads from nearby 161 villages also attended workshops.



A promise not to burn residue

5040 farmers and 449 village heads took an oath to not burn crop residue.



Involving policy makers and specialists

19 panel discussions conducted with experts and policymakers deliberating on methods for crop residue management.



Play Video



Children rallied against crop residue burning

Rallies carried the message to over 4000 farmers



Agents of change

130 farmers who adopted alternate methods of crop residue removal, were nominated as agents of change. Honored at public meetings, they worked as campaign ambassadors



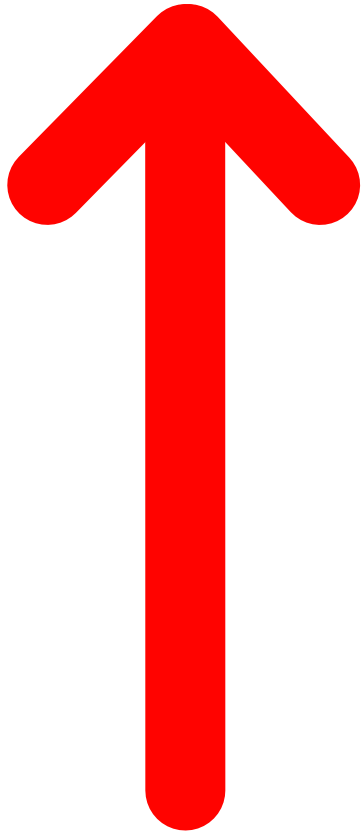
We set the agenda on crop residue management for readers and government. We wrote about the impact, the predicament of farmers, lauded efforts of agents of change, and highlighted practice and policy alternatives for government

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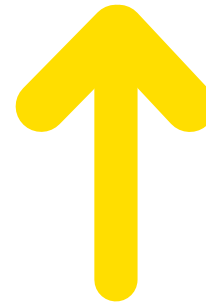
Outcomes: Reduction in Farm Fires by 21%

11,195



7 Oct – 17 Nov, 2016

8861



7 Oct – 17 Nov, 2017

Number of active fires in Haryana



Outcomes: Agricultural Bodies reacted with measures



Farmer's association to create a report on handling crop residue



Agriculture Department announced the creation of a team of scientists to share research findings with farmers on alternative methods of crop residue management.



Awareness camps to be setup across the state before the next sowing season



Outcomes: Affirmative Government Action



Central Agriculture Minister proposed :

- INR 120mn subsidy on buying 231 Happy Seeders, 38 Straw Balers, 2433 Straw Rippers
- Labor made available under a central government scheme to help in crop residue removal



Stories of 130 Agents of change to be showcased on the government website



4 Custom Hiring Centers commissioned - a group of 10-20 farmers will collectively purchase and use crop residue removal machinery at subsidized cost. More centers would be created based on this model



Outcomes: Happy Farmers saying that they will not burn crop residue





Big gain on Readership

Dainik Jagran overtook the market leader and became the No.1 newspaper in Haryana with and Average Issue Readership of 1.3 mn per the Indian Readership Survey 2017