Action Plan

for

Control on Burning of Crop Residue in the State of Punjab

October 1, 2019

Department of Science, Technology and Environment

Government of Punjab
# Action Plan for Control on Burning of Crop Residue in the State of Punjab

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1. **Background**

1.1. Punjab is an agricultural State with wheat and rice as major crops. The wheat straw is used as fodder by the animal, whereas, the use of paddy straw is limited. Paddy is cultivated in 3-million-hectare area in Punjab resulting in generation of about 20 million tons of paddy straw. Except for Basmati rice, which is generally harvested manually and straw thereof is used as cattle feed, for rope making and for other various purposes, other varieties of paddy are harvested mechanically, leaving considerable stubble in the field which is burnt by farmers.

1.2. The efforts are being made to use the paddy straw for various industrial and energy generation projects. It is estimated that about 4.30 million tons of Paddy straw is being used for different purposes as per following details:

<table>
<thead>
<tr>
<th>SN</th>
<th>Activity</th>
<th>Consumption of paddy straw million ton per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paddy straw being used in 7 Biomass based projects of capacity 62.5 MW</td>
<td>1.0</td>
</tr>
<tr>
<td>2</td>
<td>Paddy straw being used in paper / Cardboard mills</td>
<td>0.10</td>
</tr>
<tr>
<td>3</td>
<td>Paddy residue from 5 lacs hectare of basmati being utilized as animal fodder and other usages.</td>
<td>2.70</td>
</tr>
<tr>
<td>4</td>
<td>Paddy residue being managed through different available straw management system including machinery/ equipment.</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>4.30 (21.82% of total paddy straw generation)</td>
</tr>
</tbody>
</table>

1.3. The Government of Punjab is also popularising in-situ management of straw on a large scale. Govt. of India has sanctioned a project for Rs. 669 Cr. for the year 2018-19 & 2019-20 for providing subsidy for the purchase of Agriculture machinery for in-situ management of Paddy straw. Under the scheme 50% subsidy is given to
individuals and farmers and 80% subsidy is being given to groups and Cooperative Societies for purchase of machines for in-situ management of Paddy straw.

1.4. Since only part of paddy straw is currently used, the indiscriminate burning of left-over paddy and straw/stubble in open fields in the State causes widespread pollution resulting in various kinds of environmental problems, huge nutritional loss of soil and health related problems. There is need to take wide ranging measures to create awareness about the ill effects of burning of paddy as well as strictly enforcing various measures for control of burning of crop residue in the State.

2. **Prohibition on Burning of Crop Residue**

2.1. **Orders dated 22/10/2013 by Department of Science, Technology and Environment**

To curb the menace of stubble burning during post-harvesting season in the State, the Government of Punjab, Department of Science, Technology and Environment in exercise of the powers conferred under section 19 (5) of the Air (Prevention & Control of Pollution) Act, 1981 in consultation with the Punjab Pollution Control Board vide notification no. 946 dated 22/10/2013 has prohibited the burning of agriculture residue in the State of Punjab.

Any violation of this notification is punishable under section 39 of the Air (Prevention & Control of Pollution) Act, 1981 by filing a criminal complaint in the court of Judicial Magistrate first class.

2.2. **Order dated 10.12.2015 passed by National Green Tribunal (NGT)**

NGT has vide order dated 10.12.2015 in OA no.118 of 2013 prohibited the burning of paddy straw and passed detailed directions to meet the challenges arising from the burning of paddy straw.

It also provides imposing environmental compensation against defaulter.

“Any person or body that is found offending this direction would be liable to pay environmental compensation as follows:

i) **Small land holders having an area less than 2 Acres shall pay Environmental Compensation of Rs. 2500/- per incidence.**

ii) **Land holders having land area more than 2 Acres but Less than 5 Acres shall pay Environmental Compensation of Rs. 5000/- per incidence.**

iii) **Land holders having land area more than 5 Acres shall pay Environmental Compensation of Rs. 15000/- per incidence.**”
Further, violation of ban order passed by NGT is also punishable under the relevant section of NGT Act, 2010.

2.3. **Prohibitory orders under section 144 CrPC by District Magistrates**

District Magistrates in the State pass orders under section 144 CrPC every season to prohibit burning of paddy straw.

Any violation of the order passed u/s 144 of CrPC is punishable u/s 188 of CrPC.

2.4. **Order dated 7.2.2018 passed by PPCB regarding mandatory Super SMS with Combine Harvester**

In order to encourage in-situ management of paddy straw, Punjab Pollution Control Board has passed order dated 7.2.2018 under section 31-A of Air (Prevention and Control of Pollution) Act, 1981 making it mandatory for all the Combines to have Super SMS system fixed.

Any violation of this direction is punishable under section 37 of the Air (Prevention & Control of Pollution) Act, 1981 by filing a criminal complaint in the court of Judicial Magistrate first class.

3. **Directions to various Departments and Authorities**

Various Departments and authorities of the State shall take the following action to control the burning of crop residue:

3.1. **Department of Agriculture**

(i) **IEC Activities**

The Department of Agriculture will lead & coordinate various IEC activities to create massive awareness campaign in collaboration with Department of Information and Public Relation, PAU Ludhiana and other stakeholders against the burning of paddy straw. IEC Activities will include the following:

(a) Jingles on Radio Channels

(b) Production of Advertisement Films

(c) Running of films on TV Channels

(d) Display Boards against straw burning on backside of Punjab Roadways and PRTC Buses
(e) Display Boards on Bus Stands, Market Committee Yards and all Cooperative Societies in the State

(f) Painting of walls in the villages with slogans against Paddy burning

(g) Massive print media advertisement

(h) Hoardings and Panels at prominent places

(i) Publicity Vans in the villages

(j) 5000 farmer camps in the villages including demonstration of machines

(k) Rally by School children in last days of September and middle of October

(l) Deputing of Nodal officer for each village

(m) Pamphlets and leaflets to farmers

(ii) Provision of Machinery to individual farmers and groups

The Department of Agriculture will provide subsidy for purchase of agriculture machinery for paddy straw to individuals as well as groups and agriculture cooperative societies and ensure that the same are widely utilized.

(iii) Responsibility of Commission Agents

The Department of Agriculture will ensure that the Commission Agents (Artiahs) registered with agriculture produce Market Committees in Punjab will not burn crop residue. Action shall be taken against the Commission Agents for violation of ban on burning of crop residue.

3.2. Department of Revenue & Rehabilitation

(i) Entry in Khasra Girdawari

The Department of Revenue shall ensure that patwaris enter the girdawri register with red ink as “ਝੋਨਾ ਸਾੜਾ” against the fields where incidents of burning of crop residue have been reported.

(ii) Namberdaars
The Department shall ensure that no *Nambardaar* burns crop residue. The Department shall ensure action against *Nambardaar* violating ban on burning of crop residue.

### 3.3. Department of Rural Development and Panchayats

The Department shall ensure that all the members of Panchayat do not burn crop residue. The Department shall take necessary action against the members of Panchayat who violate the order regarding ban on burning of crop residue.

### 3.4. Department of Cooperation

The Department shall ensure that members of co-operative societies do not burn crop residue and action shall be taken against the members violating the ban of crop residue.

### 3.5. Department of Power

The Department of Power to ensure all JEs of Power Department are monitoring the incidents of burning in their respective jurisdiction and reporting them to the district administration for necessary action.

### 3.6. Punjab Pollution Control Board

1. **PPCB shall ensure monitoring of incidents of burning of paddy straw through Punjab Remote Sensing Centre and ensure that SMS alert is sent to all the field functionaries to take action on incidents of crop burning.**

2. **PPCB shall ensure that all incidents are reported to the District Nodal Officer appointed by the Deputy Commissioner of the district and it shall be ensured that a team visits every site of the incident within two days and environment compensation shall be imposed as per directions of NGT by the designated officer of the District Administration.**

3. **PPCB shall ensure that all data with respect to burning of crop residue as obtained from Remote Sensing authorities and action taken on the incidents and various MIS reports are available through a web based application with facility to have dashboard to drill down data.**

4. **The Board shall ensure that in cases of persistent defaulters of crop residue burning, appropriate coercive and punitive action is taken including launching of prosecution under Section 15 of the Act of 1986.**
(v) Monitor the ambient air quality of the major cities and make the data available to district authorities and the State to ensure further action in case of deterioration of quality.

3.7. Department of School Education

The Department of School Education shall ensure that employees of all the Government & private schools in Punjab do not burn crop residue. Suitable action shall be taken against the employees who are violating the ban on burning of crop residue.

3.8. Department of Home Affairs

The Department of Home Affairs to ensure that necessary assistance is rendered by the police authorities for enforcement and implementation of various directions and orders issued with respect to ban on burning of crop residue. The police shall particularly render assistance to the District Administration for monitoring of hot spots where large scale incidents of burning of crop residue in previous years.

3.9. Department of Personnel

The Department of Personnel shall ensure suitable directions to all the State Government Departments, Boards, Corporations and Autonomous Bodies to direct their employees not to burn crop residue and suitable disciplinary action shall be taken against the employees for violation of ban on burning of crop residue.

3.10. District Administration

(i) Ensure optimal utilization of machinery provided for in-situ management of the crop residue.

(ii) The Deputy Commissioner and SSPs of the district shall jointly hold District Level Monitoring meeting with all the stakeholders to strictly enforce the orders banning paddy stubble burning.

(iii) Ensure Sub-Division Level Monitoring Committees meet daily/ alternate day and review the progress of various activities and take necessary action

(iv) Ensure visit to hot spots (villages where more than 75% area of the village burnt since last three year as per the stubble burning data) by senior officers of the Districts and make special arrangements to contain the burning of crop residues in these villages.
(v) Appoint one Cluster Officer for every 20 villages to coordinate the efforts and one nodal officer for each village from the pool of employees available with various departments.

(vi) Appoint one Village Nodal Officer for each village from the pool of employees available with various departments.

(vii) Monitor the progress of various Stakeholder Department & send the consolidated progress report to the Department of Environment on email stubble burning progress report@pbdecc.gov.in so as to consolidated report be sent to the Chief Secretary and other State and Central functionaries.

(viii) Ensure no burning of crop residue by special categories:

(a) Lease holders of the Panchayat Land or Shamlat Land of the villages

(b) Government employees

(c) Commission agents

(d) Panchayat Members

(e) Other such category of cultivators

(ix) Ensure that all patwaris make red entry in the Khasra girdawris in case of burning of paddy stubble.

(x) Constitute teams to monitor and physically inspect all incidents of burning of crop sites and environment compensation is imposed accordingly.

4. Governance Mechanism

The campaign of this nature will require mobilization and effective coordination of efforts of various departments in the State. The entire program will be governed through the following mechanism:

(i) State Level Coordination

(ii) District Level Coordination

(iii) Sub-division Level Coordination

(iv) Cluster Officer

(v) Village Nodal Officer

5. State Level Coordination and Monitoring
At the State Level, a Committee under Chief Secretary and comprising of the Administrative Secretaries of the following Departments will coordinate, monitor and decide various issues towards effective implementation of the ban on burning paddy straw:

(a) Department of Agriculture  
(b) Department of Science, Technology and Environment  
(c) Department of Cooperation  
(d) Department of Rural Development  
(e) Department of Power  
(f) Department of Water Resources  
(g) Department of Defence Services Welfare  
(h) Department of Information and Public Relations

The State Government will further depute senior Administrative Secretaries in various districts to monitor the implementation of the ban. They will be assisted by Senior Officers from PPCB, PSPCL and Agriculture.

Chief Secretary will also review the progress with the Deputy Commissioners through VC.

6. District Level Coordination and Monitoring

(i) District Administration will have the key role in effective implementation of the plan. All the Departments at the district level will have to extend their support.

(ii) There will be a District Level Monitoring Committee, which shall consist of the following officers:

(a) Deputy Commissioner - Chairman  
(b) Senior Superintendent of Police - Member  
(c) Additional Deputy Commissioner(D) - Member  
(d) EE / AEE, PPCB - Member  
(e) District Revenue Officer - Member  
(f) Chief Agriculture Officer - Convener

(iii) The district level committee will meet on weekly basis or more frequently and review the IEC activities, enforcement activities and other facilitation activities and take necessary action.

7. Sub-Division Level Coordination and Monitoring
(i) The Sub-Division Level Monitoring Committee shall consist of the following officers:

(a) Sub-Divisional Magistrate - Chairman
(b) Deputy Superintendent of Police - Member
(c) BDPO - Member
(d) Agriculture Officer - Convener

(ii) The sub-division level committee will meet daily/ alternate day and review the progress of various activities and take necessary action.

8. **Cluster Officer**

(i) In order to ensure effective implementation, the Deputy Commissioner will appoint a Cluster Officer for every 20 villages to coordinate the efforts.

(ii) The Cluster officers will be drawn from the block/ sub-division level officers of various departments such as Agriculture, Revenue, Cooperation, Rural Development, PSPCL, Defense Welfare etc.

(iii) Cluster Officer shall coordinate with Village Nodal Officer for various activities to control burning of stubble by the farmers.

9. **Village Nodal Officer**

(i) There shall be one nodal officer appointed for each village. The Deputy Commissioner can utilize the pool of employees available with various departments for the same.

(ii) The Village Nodal Officers will be drawn from amongst the officials such as Secretaries of Cooperative Societies, Panchayat Secretaries, JE/ Lineen of PSPCL, officials of Agriculture/ Horticulture and Soil conservation, Guardians of Governance etc.

(iii) The village Nodal officer will assist in various facilitation and enforcement activities at village level such as:

(a) To help create awareness in village by way of holding meetings with farmers.
(b) To help arrange CRM machines, if possible, in village.
(c) To distribute pamphlets/ leaflets etc in village.
(d) To make announcements in Gurdwaras or by other modes.
(e) To interact with village schools for organizing rallies and awareness lectures to students so that these students can further create awareness of their parents.

(f) To identify those farmers who are likely to put fire to paddy residue and to convince them by way of one to one contact.

(g) To get to know the farmers who have burnt the residue and to ask the revenue Patwari of the village to make relevant entry in Revenue records, as per separate instructions issued by Revenue Department.

(h) To get to know the land of employees of Govt/ board/ corporation/ coop societies and also the panchayat lands and to implement govt. instructions regarding not putting fire to residue in such lands.

(i) To report incidence of crop burning to the higher authorities

10. Reporting Formats

Reporting formats for reviewing the progress of implementation at District and State level are given in annexure.

(i) Punjab Remote Sensing Centre will provide the following reports

(a) PRSC 1 - District-wise details of Active Fire Events for the monitoring at District Level

(b) PRSC 2 - District-wise Comparison of Active Fire Events for 2017, 2018 & 2019 for the monitoring at District and State Level

(ii) Action taken reports from District Administration

(a) ATR 1 - Action Taken Report by DCs - Stubble Burning

(b) ATR 2 - Action Taken Report by DCs on Special Cases

In addition, a checklist has also been given in the annexure for DC’s to check various steps taken for control of stubble burning.

11. Awards

State government will award the best performing 5 districts, 20 sub-divisions and 40 blocks.
Annexure

PRSC1 – District wise details of active fire events

This report will be sent by Punjab Remote Sensing Centre, Ludhiana to all the Deputy Commissioners and PPCB on daily basis

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Latitude</th>
<th>Longitude</th>
<th>District</th>
<th>Tehsil</th>
<th>Block</th>
<th>Village</th>
<th>Remarks</th>
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**PRSC 2 – District wise Comparison of Active Fire Events for 2017, 2018 & 2019**

This report will be sent by Punjab Remote Sensing Centre, Ludhiana to all the Deputy Commissioners, PPCB and Directorate of Environment on daily basis.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>District</th>
<th>For the current date</th>
<th>Cummulative (w.e.f. Sept 23 )</th>
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<tbody>
<tr>
<td></td>
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<td>Current date</td>
<td>Current date</td>
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Total
# ATR 1 - Action Taken Report by District Administration

This report will be compiled by District Administration and sent on daily basis to PPCB and Directorate of Environment.

<table>
<thead>
<tr>
<th>District</th>
<th>No. of fire incidents reported upto date</th>
<th>No of sites visited</th>
<th>No. of sites at which no burning observed</th>
<th>Nos of cases in which EC imposed</th>
<th>Total amount of EC imposed (in Rs.)</th>
<th>Nos of cases in which red entry made in Khasra Girdawari</th>
<th>Nos of case in which Prosecution / FIR filed</th>
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**ATR 2 - Action Taken Report by District Administration on Special Cases**

This report will be compiled by District Administration and sent to PPCB and Directorate of Environment on daily basis.

<table>
<thead>
<tr>
<th>District</th>
<th>Nos of cases identified of Panchyat Land</th>
<th>Nos of cases identified of land owned by Government employees</th>
<th>Nos of cases identified of land owned by Panchyat Member</th>
<th>Nos of cases identified of land owned by Commission Agents</th>
<th>Nos of cases identified of land owned by Namberdar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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Check list for DCs

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Check Point</th>
<th>Yes/ No.</th>
</tr>
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</table>
| 1      | Whether District Level Monitoring Committee meetings being held regularly?  
         How many meetings have been held since 15.09.2019?  
         Whether specific action points drawn from the meeting and proceedings made? |          |
| 2      | Whether Sub-Division Level Monitoring Committee meetings being held?  
         How many meetings have been held since 15.09.2019?  
         Whether specific action points drawn from the meeting and proceedings made? |          |
| 3      | Whether the detailed analysis of incidents of stubble burning from previous years supplied by PPCB has been reviewed?  
         Whether list of hot spots (villages where more than 75% of the village area burnt for past three years) has been scrutinized by District Level Monitoring Committee?  
         Whether Special arrangements have been made for these hot spots? |          |
| 4      | Whether subsidized machinery has been delivered to the farmers and Groups as per the approved plans? |          |
| 5      | Whether enforcement teams have been constituted to visit the incidents of burning of stubble as reported by PRSC?  
         Whether site visits are conducted in two days of incidents?  
         What is the average time taken in ensuring teams visit the reported incidents? |          |
| 6      | Whether arrangements have been made to compile action taken report on the visits?  
         Whether imposition of EC has been promptly done after the visit?  
         Whether other action such as filing of complaint/ FIR etc. has been done? |          |
| 7      | Whether arrangements have been made to ensure compliance by special categories such as Government employees, Commission Agents, Panchayat Members, Numberdaars etc.?  
         Whether district heads of these departments been asked to take undertaking from their employees regarding compliance? |          |
| 8      | Whether arrangements have been made to ensure red entry in khasra girdawari of the fields where incident has been reported and verified? |          |