

### The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

#### Josh Cole, Grants Director

Grant Recipient Details				
Your name	Suman Bhattarai			
Project title	Rhino movement outside the protected area: Habitat Suitability and People Perception for Long Term Conservation			
RSG reference	21609-D			
Reporting period	March 2017 to Sep 2018			
Amount of grant	£9990			
Your email address	sumancha004@yahoo.com			
Date of this report	September 2018			



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Appraise habitat suitability outside the protected area				We appraised habitat suitability in effective way but unable to complete on time as per mentioned in the proposal.
Assess local perception towards increased population of rhino in their locality.				We organised social survey to assess perception in both buffer zone and outside of buffer zone where rhino population is found.
Organize conservation outreach activities to share the potential benefits from rhino presence in their locality				Instead of proposed activities, we celebrated world rhino days, organised training for students and supported students to carry out their thesis.
Produce extension material and distribute among conservation stakeholders				We produce more than proposed number of extension materials; rhino conservation education toolkit, posters, article and t-shirts. We distributed in other districts and protected areas which are not our proposed site but they are rhino habitat.

### 2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We faced following unforeseen difficulties while implementing project so we needed more time than mentioned in proposal. During the project period, there were elections (3 level) so people were busy in election. The representative of local conservation institutions, community forests user committee (groups) and other local people also involving in the election. Some of them are candidates in the election. There was not possibility to organise the activity effectively so we are obliged to postpone some of our activities time to time. This situation has increased our number of field visit and stays. Similarly, I got scholarship to pursue PhD in China in this year and I faced little bit difficult to manage time and complete project on expected time. This situation has delayed project.

To overcome the situation, we urged The Rufford Foundation for extending time duration of project. We also mobilise many conservation students, local motivators and community. Finally, we successfully completed our project in effective manner



and able to spread better understanding about rhino conservation importance in the locality.

#### 3. Briefly describe the three most important outcomes of your project.

- 1. Habitat suitability: We appraised the habitat condition, food availability and the existing disturbance to rhino outside the protected area of Chitwan. We found that outside protected area in Chitwan is also suitable habitat for rhino but the area is invaded by non preferred food species and anthropogenic disturbance was also found to be remarkable. Harvesting of forest products and forest fire cases were also observed outside the protected area where rhino presences were occurred. We also observed the concentration of rhino in certain pockets so management action is primarily needed in less suitable and surrounding areas. Therefore, the concentrated population can disperse easily. Similarly, 70 % of total study plots were observed invasion by non preferred species so management intervention (alternative use of invaded plants) is prescribed to reduce pressure of invaded species.
- 2. People Perception: We found that people have heard rhino presence in the locality could be beneficial but most of them don't know how the presence of rhino will create opportunities to them? Some people don't believe rhino presence will bring measurable benefits instead of increasing conflicts. This prevails that majority of people were still unknown about the possible benefits of rhino presence in the localities. Executive committee of forest user groups, conservation institution and community groups were aware about the potential benefits; tourism related business and ecological benefits. But, family members of user committee representative (member) were also less aware about importance of the rhino. We also observed that farmers and people nearby/close to forest area were not positive towards increase population of rhino because they always afraid with chances of increasing crop raiding, rhino encounters. From this finding, we realized that tourism promotion activities as means for income generation, education on ecological importance of rhino, conflict mitigation program special focused to those farmers live close to forest. We organized different awareness activities and able to create better understanding to some extend in the locality.
- **3. Community outreach activities and Extension Materials:** We organised community outreach activities; school teaching, education and interaction among students, communities and representative of conservation institution. Through these activities, we were able to make realisation especially on student and youth about the importance of rhino presence in the localities. Similarly, we published rhino conservation educational toolkit and distributed to conservation institutions, academic institution, schools, clubs, forest user committees etc. This toolkit will be strong source of information to interested one who wants to conduct rhino conservation education. We had also distributed these to Bardia, Shuklaphanta and Parsa National Park where rhino are found. Similarly, students, studying wildlife conservation and



biodiversity conservation, have got opportunities to learn; how to assess habitat suitability, people perception toward wildlife conservation, organise education programme to sensitise local people for conservation action. So, this project was also able to enhance capabilities of rising conservation youngsters.

# 4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

The project was field based and community targeted project and most of activities were carried out through community involvement. Some activities were organised in the joint venture and assistance of local conservation based institutions; CBOs, NGOs, bufferzone user groups, schools, students, teachers etc. Local people have been kept in priority while recruiting field assistants so that we could build harmonious relationship with local communities during project period. We also involved local people in project activities which also played crucial to organise activities in effectual way. Local people were also mobilised as local resource person while conducting field survey and vegetation assessment. Local communities; forest user groups, youths, students were participants in education and school programme also.

#### 5. Are there any plans to continue this work?

People's thinking cannot be changed within an attempt or 1-year scheme. Regular interaction is important to sensitise them so I have planned to organize field visit activities in those sites and interact with people after the project completion also. Being local resident of the Chitwan and team member form the local area, we can organise some events volunteer as well. In other hand, after the Chitwan, Bardia followed by Shuklaphanta and Parsa National parks are also important rhino habitat in Nepal. With the increasing population and limited habitat in core zone of these protected areas, rhino movement can also be outside of these protected areas. So, I am thinking to replicate similar kind of project in new areas in days to come.

Similarly, many people are generating income by using name of rhino or making rhino as medium for income generation so we want to assess their opinion/willingness in contributing particularly rhino conservation. During this project period also, we observed branding of rhino in local and surrounding area for many purposes. Many people are using rhino name for their business (hotel, guesthouse, departmental stores, security institution etc), as institution name (bank, clubs), keeping rhino picture/statue in their business room. We found some people making rhino statue for sale, printing rhino picture in t-shirt, hotel rooms and other products. So, we have planned to appraise willingness of those people who have been using the rhino as brand in their business to contribute for rhino conservation. If we can mainstream willingness of those people, that could be big source for rhino conservation program for long term.



#### 6. How do you plan to share the results of your work with others?

After completion of some activities, results and reports were shared with students, academicians and with local people. The findings of the perception of local people were disseminated with local people and students during education and school teaching activities. Similarly, project progress was shared The Rufford Foundation conference in Kathmandu, Nepal organized by Institute of Forestry Hetauda Campus, Hetauda, Nepal. The finding of habitat suitability was presented in the Institute of Forestry, Pokhara campus, Pokhara, Nepal. A detail report has been prepared and disseminated among concerned stakeholders. We prepared article entitled "World Rhino Day; Background and rationale" in Nepali by targeting local people. We have been utilizing the finding of the project in teaching of wildlife and biodiversity conservation courses in academic institution.

After project completion, we are planning to share our work with concerned stakeholders. We are developing scientific article for publishing in international journal from which scientific communities will be benefitted. In addition of these, we will publish one page summery in local language. We will apply and take part in national and international forum/seminar to share our findings. As an academician, I will utilize the gained knowledge/finding while teaching wildlife, biodiversity and nature conservation related course.

### 7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

After receiving the fund on March 2017, we started project and continued up to September 2018. So, The Rufford Foundation grant was utilised from March 2017 to September 2018 to organize activities mentioned in proposal. As mentioned earlier, due to some reasons project took more time than proposed duration to complete. We extend project duration so we used approved grant up to September 2018. Though project duration was extended and days of field visits increased, we limited ourselves within the proposed budget.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Accommodation	2700	2770	-70	Increase field visit days due to postpone schedule
Food	3500	3550	-50	Increase field visit days due to postpone schedule
Stakeholder Interaction	300	300	0	Limited within budget



Questionnaire Survey	500	500	0	Limited within budget
Focus Group Discussion	870	700	170	We minimize cost for utilizing in field activities.
Direct Observation	200	0	200	We did direct observation during vegetation survey so we utilized this budget in world rhino day celebration.
Education Program	750	800	-50	Increased in school number
Poster	500	450	50	We minimize this budget to increase booklet.
Booklet Publication & distribution	1589	1800	-211	Published in high number & distributed in other site also
Sharing workshop	600	450	150	We minimize this budget to increase booklet.
Communication	333	350	-17	Due to more time duration
Transportation	920	920	0	Used public buses also
Field gear and Equipment hire	585	500	85	Transfer to extension material production
Stationery	535	500	35	Utilized in other section
T-shirt Production	240	300	-60	Increased in numbers
Rhino Day Celebration	0	250	-250	We celebrate 2 times
Total	14122	14140	-18	Exchange rate (Bank transaction); 1 £ pound sterling = 133 Nepalese Rupees

**The Rufford Foundation Contribution=** 9990 (Outside the protected area and bufferzone) **ARP Contribution =** 4132 (Bufferzone part)

#### 9. Looking ahead, what do you feel are the important next steps?

We will develop articles based on the result of our project to publish in national and international journals. We will also conduct some community outreach activities; education, interaction, as follow up of this project.

Besides the Chitwan, there are also other habitats (Parsa, Bardia, and Shuklaphanta) in Nepal. So we are thinking to replicate similar kind of project in those areas. In addition with this, many people are using rhino name (brand) or making rhino as medium for income generation so we want to assess their opinion in contributing to rhino conservation. We observed rhino brand is being used for business, as institution name, keeping rhino picture/statue in their business room. Some people were observed making rhino statue for sale, printing rhino picture in t-shirt, hotel rooms and other products. So, we are also thinking about to appraise willingness of those people, who have been using rhino as medium in their business, to contribute for rhino conservation.



# 10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes, I used The Rufford Foundation logo in each and every activity and publication produced in relation to this project. Logo was kept in banner, certificate, education material, poster, notice etc. In some cases, where it is not possible to print logo, credit was made by briefing orally and sometimes writing "The Rufford Foundation" as supporting institution.

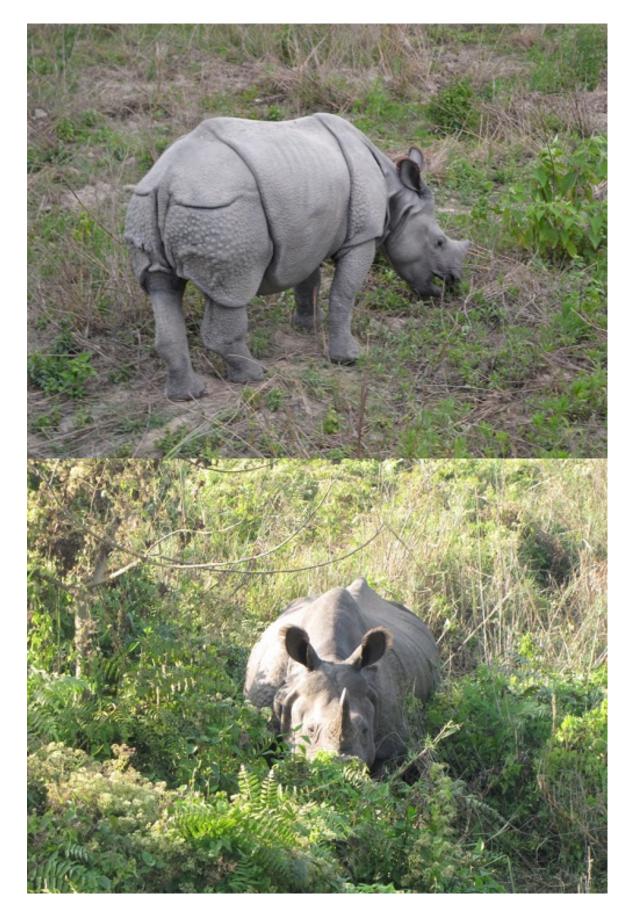
# 11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Being an academician, I often encourage students to take part in my each project so that we can generate human resources on related field. I implemented this project in such a way that many students could take it as learning platform. I mobilized conservation based students as my assistant for organizing proposed activities. **Mr. Santosh Paudel**, studying forestry and wildlife in Institute of Forestry, was mobilized as field assistant to organize community outreach activities, social survey and vegetation survey. Similarly, **Mr. Sunjeep Pun**, studying forestry and biodiversity conservation, was involved in habitat suitability assessment. He has also done his thesis as part of our project. Beside them, Students; **Anu Paudel, Alisha Sharma, Ambika Regmi, Barsha Tripathi, Pratikshya Dahal** etc., and academicians; **Rajan Subedi, Bishnu Hari Wagle, Bishnu Prasad Devkota** etc. were also involved in the projects. The project was able to enhance knowledge of many students who are studying wildlife and biodiversity subjects. I hope these human resources will utilize their learning in rhino conservation in future. Some of them have already started.

#### 12. Any other comments?

I have done four projects in support of The Rufford Foundation which has played crucial role in my career and in rhino conservation. So, I would like to remember The Rufford Foundation first for supporting and encouraging me regularly. I also like acknowledge Asian Rhino Project for additional assistance. Special thanks go to local NGOs, Community Based Organizations (CBOs), schools, clubs, Forest User Groups, Bufferzone User Groups, local youth and park staffs for their help to make possible in implementing project effectively. Last but not least I owe depths gratitude to my referees for their incredible support during the project. I would like to appeal everyone to contribute in nature conservation what could be possible from your side.









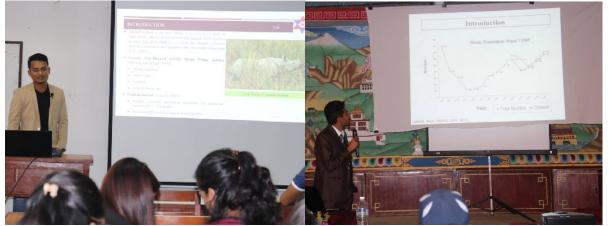




Left: Field visit during habitat suitability assessment. Right: Project crew during vegetation survey.



Left: Questionnaire survey. Right: Education toolkit handover.



Left: Presenting habitat suitability finding. Right: Presenting progress at the RSG Conference.





Left: Rhino sketches in exhibition. Right: Prize distribution.



Left: Rhino statue for selling. Right: World Rhino Day (September 22nd) celebration.



World Rhino Day celebration group photo.

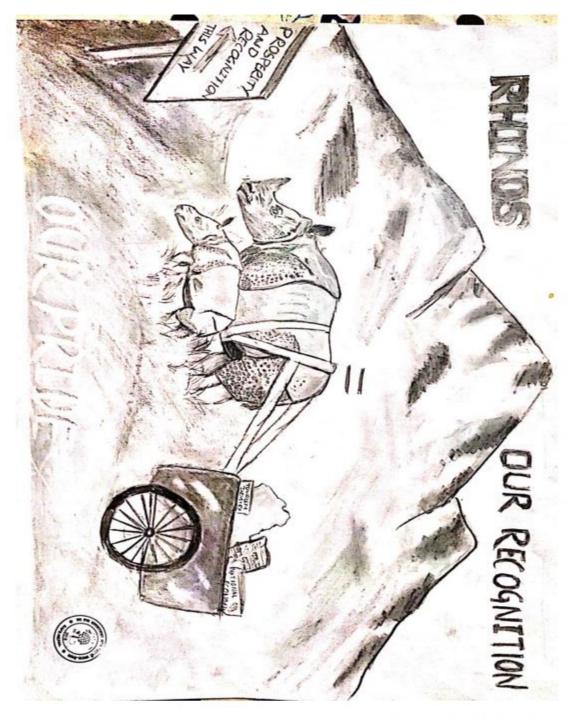
### Rhino Sketch (World Rhino Day- September 22nd, 2018)

Rhino! Our Recognition, Our Pride































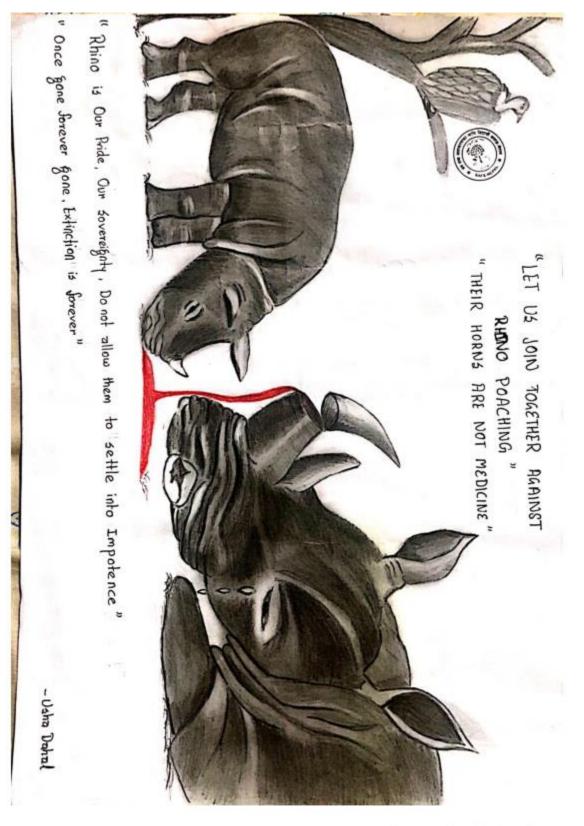






























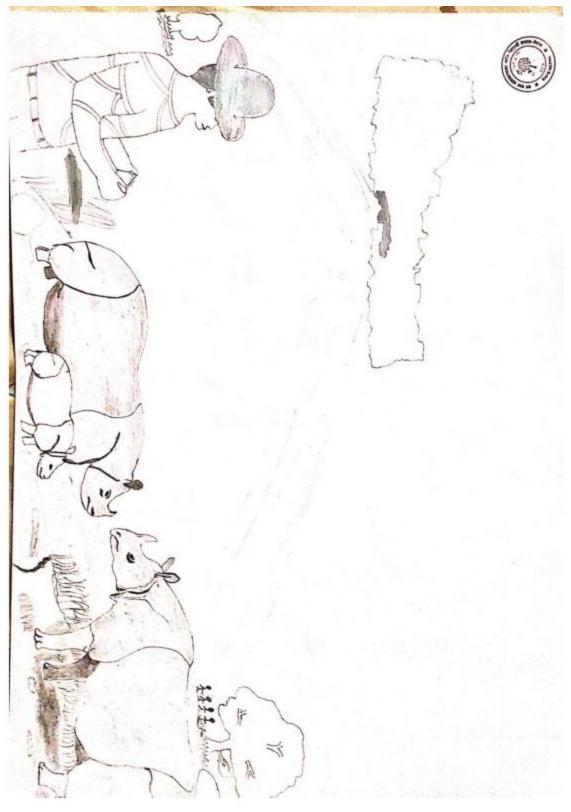


—<u>Art by</u> Ayushmo Shrestho (1<sup>st</sup> year 2<sup>nd</sup> sem)







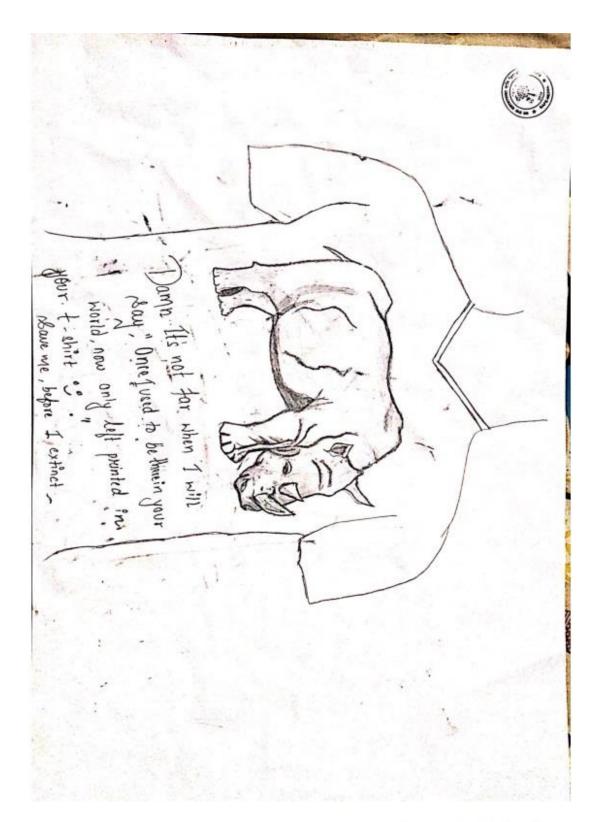






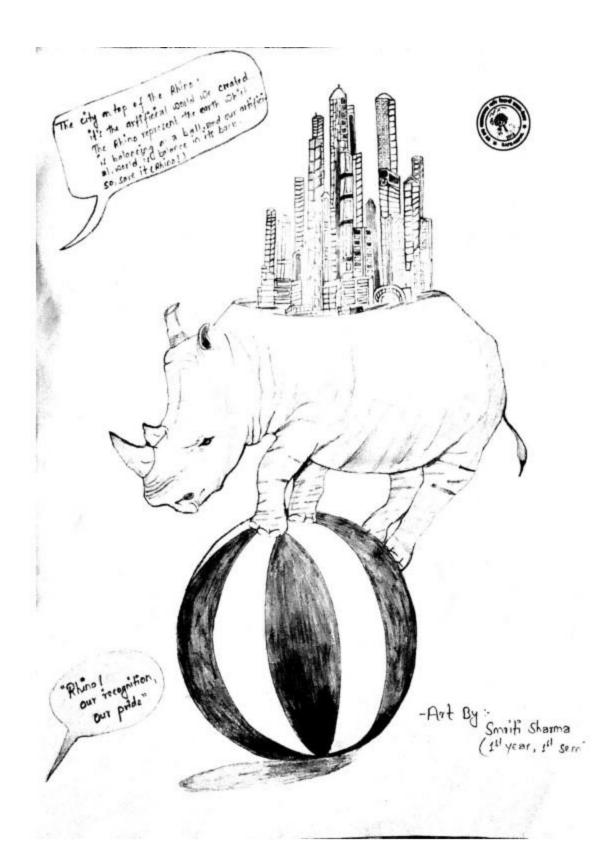






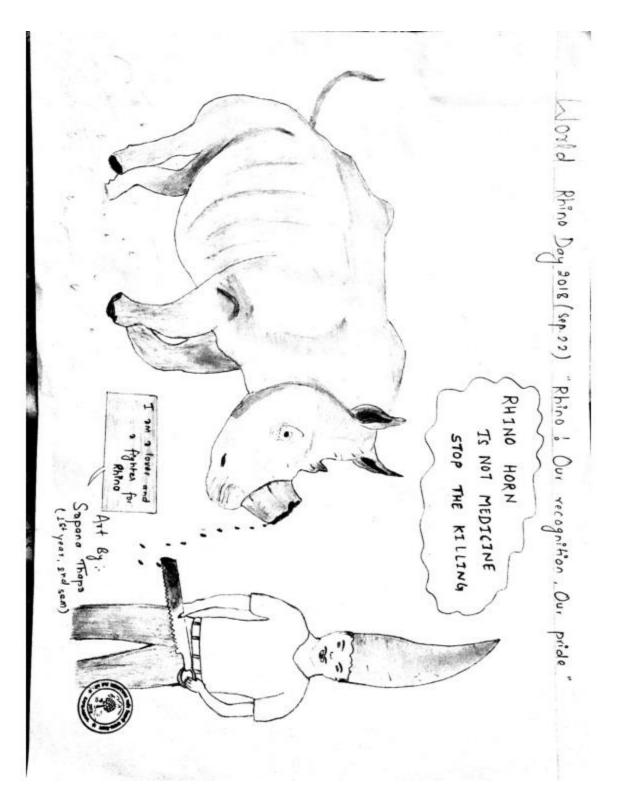














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