We selected 44 locations along two transects across Hyderabad, India for measurements of ecosystem services via direct observation and participatory methods. DIRECT MEASUREMENT: In order to quantify ES, we collected the direct measurements data (counting, measuring, observations etc..) from 42 locations using the methods in the TESSA framework (Peh et al., 2013) and other methods. Water: Water yield (a provisioning service) is a measure of water quantity and quality. We measured the daily domestic water consumption for drinking, cooking and washing in the selected locations. (both water quality and quantity). For the water quantity, we used following methods. If the water is taken from a well or non-metered tap/river/stream/tank, we measured the quantity directly at the source (Whittington et al., 1990). We recorded the water quantity extracted from the source by the HHs in the site for a period of one hour in the morning as that is one of the peak times people come to collect water in India (Bimla et al., 2003). We measured the quality of water for faecal coliform bacteria to trace any sewage or faecal contamination using ‘H2S strip test’, which the colour of the sample turns black within 24 hours if there is bacteriological contamination. We collected two water samples from each water source in each site to get an average value. We ensured to get water from a little distance away from the bank or middle of the well and collected the water samples after few minutes of water flow out of a tap to minimize extraneous contaminations (Kumpel et al., 2017). Carbon storage: We estimated the Carbon storage (Organic Carbon in Above Ground Biomass and total Carbon in Soil) of forests, grasslands and rice fields in each of the sample locations. There were fou r main land cover categories as such forest, grassland, cropland and built-up areas in the study area according to the satellite image of the area. We assumed that the above ground and below ground Carbon is zero in built-up areas. We estimated the Carbon stock of forest, grassland and cropland suing following methods. Forest dominated habitats: In order to estimate the above ground live biomass Carbon storage of ‘tree-dominated habitats’, we considered a land patch more than 10 percent of tree canopy cover and area of more than 0.5ha as forests (FAO, 2001). We laid out the sample plot of 20mx20m (0.04ha) at a randomly selected location of the fore st (if available in our study locations) and recorded the GPS coordinates of all corners of the plot. We measured the diameter at breast height (dbh) and height of the stems and branches. In order to estimate the biomass of the understorey vegetation, we destructively harvested the plants smaller than 1.3m in height and grass of a 0.5m x 0.5m (0.000025ha) plot. These samples were then oven-dried at 105°C until a constant dry weight is obtained. Grass-dominated habitats: According to TESSA habitat classification Peh et al., 2013), lands covered with herbaceous plants, in which tree and shrub cover is less than 10% and of more than 0.5ha in area are defined as grasslands. In order to estimate the above-ground Carbon storage of grasslands (within the village boundary), we laid a 20mx20m plot randomly to represent grassland and followed the same steps as in forests. Croplands: We randomly selected a rice field within the village boundary and recorded the GPS coordinates of all the corners of it. We further observed and/or asked the farmer how many sacks of rice obtained from that field and measured the weight of one sack from their store. Estimating Soil biomass: We obtained two soil core samples 20m apart from each of sample plots (NE and NW corners) in forest, grass and croplands (if available) in each sample location. Here, we assumed that the maximum depth of the Organic layer is within 20cm as Carbon content tends to decline after 20cm (Zhou et al., 2017). We collected the soil cores with 20cm depth using a soil corer of 2.9cm diameter and removed any stones, plant residues and roots. Crop production: For the crop production, we considered rice as it is the most common crop of the areas in TS (Socio Economic Outlook (2018). We visited 10 randomly selected HHs and recorded the main crop type they consume, measured the quantity of rice they consume per meal (converted to the daily consumption using number of meals) and how much they paid for 1kg of rice. We finally converted the data for 10 HHs to mean values for each sample locations. We also collected data on how many links are in the value chain between the user and the source, how much rice is purchased by an average HH and the price they spent on kilogram of rice from randomly selected 5 local shops (or less if at least five shops are not available in the site). To understand the scarcity of rice or periodic variations (last year), we collected the data on average prices (which represent scarcity or abundance) of rice (buying and selling) in different months of the year from above selected local shops. Wild goods: We considered fuel wood and charcoal as the most common wild goods people use in day to day life in each sample site. We visited 10 randomly selected HHs and recorded the main energy source they use for cooking, measured the quantity of fuelwood/charcoal they use per day and how much they paid for 1kg of fuelwood/charcoal. We then converted the data for 10 HHs to average values for each sample locations. We collected data on how many links are in the value chain between the user and the source and the price they spent on kilogram of fuelwood/charcoal from randomly selected 5 local shops (or less if at least five shops are not available in the site). To understand the scarcity of fuelwood/charcoal or periodic variations (last year), we collected the data on average prices (which represent scarcity or abundance) of fuelwood/charcoal (buying and selling) in different months of the year from above selected local shops. Sanitation: We collected data on type/s of sanitation facilities by observing 10 randomly selected HHs in study locations. We measure the frequency of using the sanitation facility by counting the usage of public or communal toilets in the sample sites (if available) for one hour. Recreation: In order to obtain the data on recent (last week) use of recreational sites we visited one mostly visited recreational site in the sample locations and recorded visitations and time spent per each visit for one hour and convert it to a week. Aesthetic: In order to evaluate the peoples’ preference for different landscapes, we took 3 photos of different land uses in each location and get them printed. We then asked 10 randomly selected HHs to rate the attractiveness of these photos by assigning 1 for the most preferred one, 3 for the least preferred one and 2 for the medium preferred landscape. Spirituality: We obtained data on type/s of recent (last week) use of any areas for spiritual purpose by recording visitations and time spent per each visit for one hour and convert it to a week. PARTICIPATORY METHODS: We used “Participatory Mapping” and focus group discussion methods at 42 locations. In each location, we used purposive/convenience sampling method to select the participants (3-10 members for each discussion group of male and female) from pre-determined category of economic group (rich, poor) and formality of the household (formal, informal). We used three main exercises for following ES; water yield (quality & quantity), crop production, wild goods, fisheries, sediment regulation, sanitation (nutrient delivery/removal), hazard mitigation, recreation, aesthetics and spirituality which were selected from Schreckenberg et al., (2016). We conducted each of these three exercises twice, once with men and once with women for the selected participants. We used following exercises: In order to evaluate which ES are used by the community in each location and to compare the importance of each ES, we used exercise T and asked them to produce a list of ES they depend on by focussing the discussion on the ES used in current study. We also evaluated how do ES present in the community contribute to local livelihoods using the prepared list of ES and exercise W. We asked them to assign a score for each ES in terms of nine dimensions of wellness (i.e., emotional, career, social, spiritual, physical, financial, intellectual, creative and environmental wellness). We used exercise U to locate sources (where they get it) and the origins (where it is originated) of ES relevant flows spatially for local use for livelihoods and trade with the use of land cover maps. In order to outline the changes in the supply of ES and to identify seasonal variations in (in)direct contributions of ES we used exercise N. We collected the data on seasonal variation (monthly) of the ES. . REFERENCES Peh, Kelvin S-H., et al. "TESSA: A toolkit for rapid assessment of ecosystem services at sites of biodiversity conservation importance." Ecosystem Services 5 (2013): 51-57. Schreckenberg, K., et al. 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