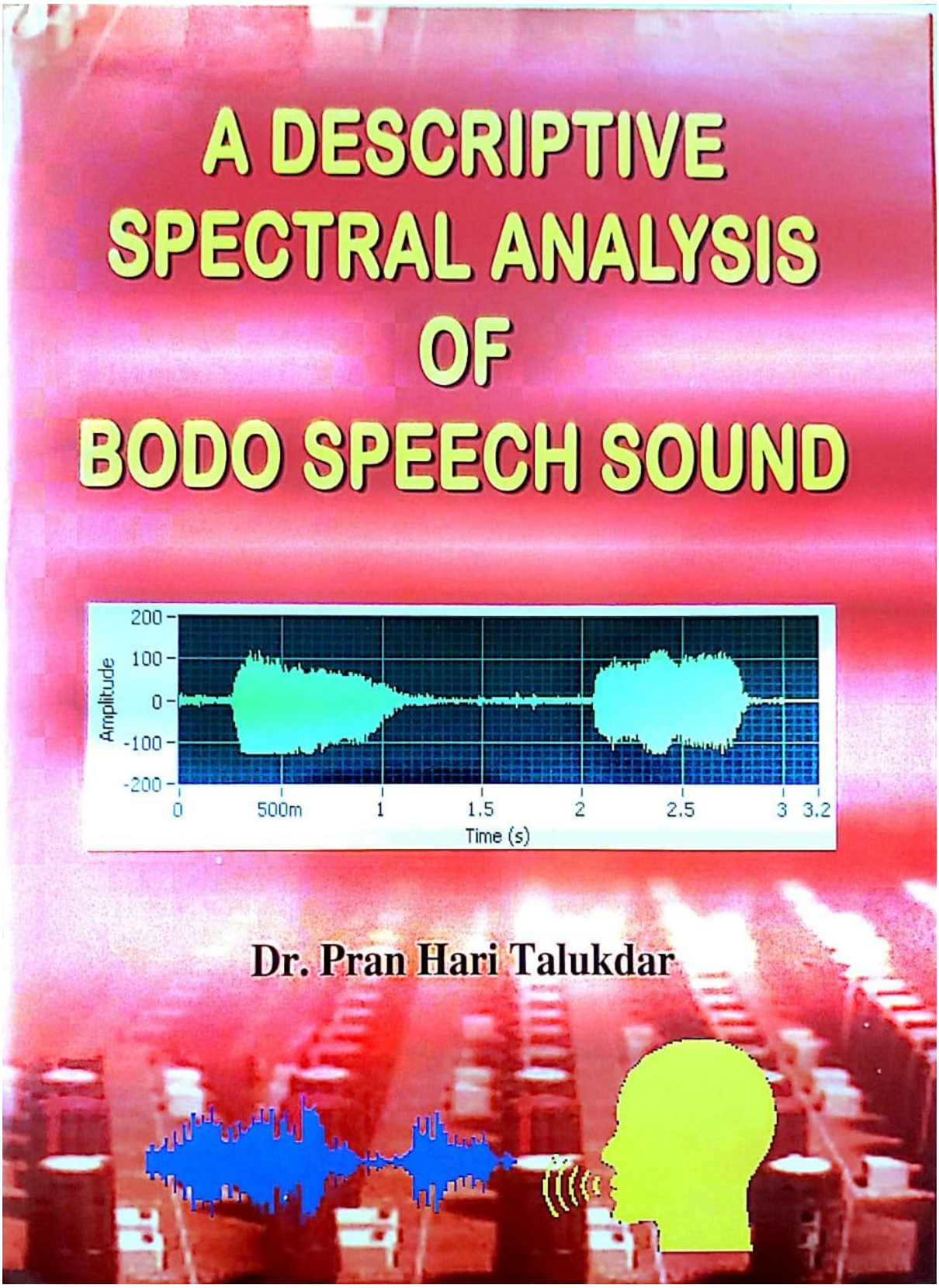
Contribution of Dr. Prof. Pran Hari Talukdar in Boro Sahitya Sabha



A DESCRIPTIVE SPECTRAL ANALYSIS OF BODO SPEECH SOUND

About the Author

Prof. Pran Hari Talukdar, who authored the book entitled "A Descriptive Spectral Analysis of Bodo Speech Sound.", did his Masters in Physics (Gauhati University) and Computer sci. & Technology (IIT, Roorkee). He did his Ph.D under the Gauhati University. Prof. Talukdar served as a lecturer of Physics in Cotton College, Guwahati, for 4(four) years, as a lecturer of Electronics & Tele-communication in Assam Engg. College, Guwahati, for 7(seven) years and as an Associate prof. & H.o.D, in the department of M.C.A, Assam Engg. College, Guwahati, for 3(three years). He served as a Professor and H.o.D, in the department of Instrumentation & USIC, Gauhati University, for nearly, 19 years. He authored 16 books in the field of computer science, signal processing, Speech processing, Big Data Analytics, Computer Networks, Computer architecture and C & C++ programming. Thirty nine research scholars completed their Ph.D works under the supervision of Prof. Talukdar. Prof. P.H.Talukdar has more than 200 International publications to his credit. The primary research areas of Prof. Talukdar include: Computer architecture, Computer Networks, Speech Processing, Development of Language Technology, Neural Networks, Big Data Analytics and Cloud Computing.

Bodo Sahitya Sabha

A Descriptive Spectral Analysis of Bodo Speech Sound

Prof. Pran Hari Talukdar

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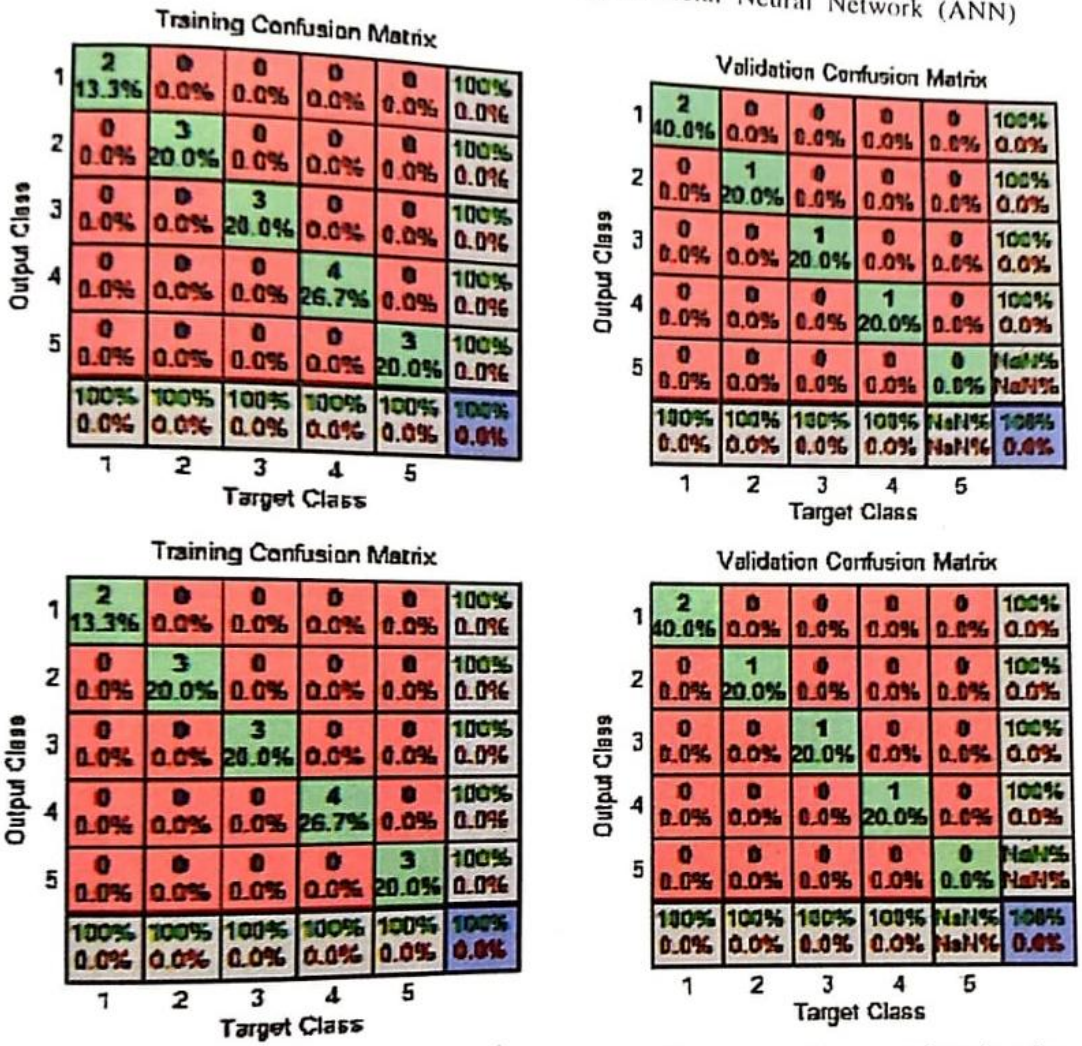
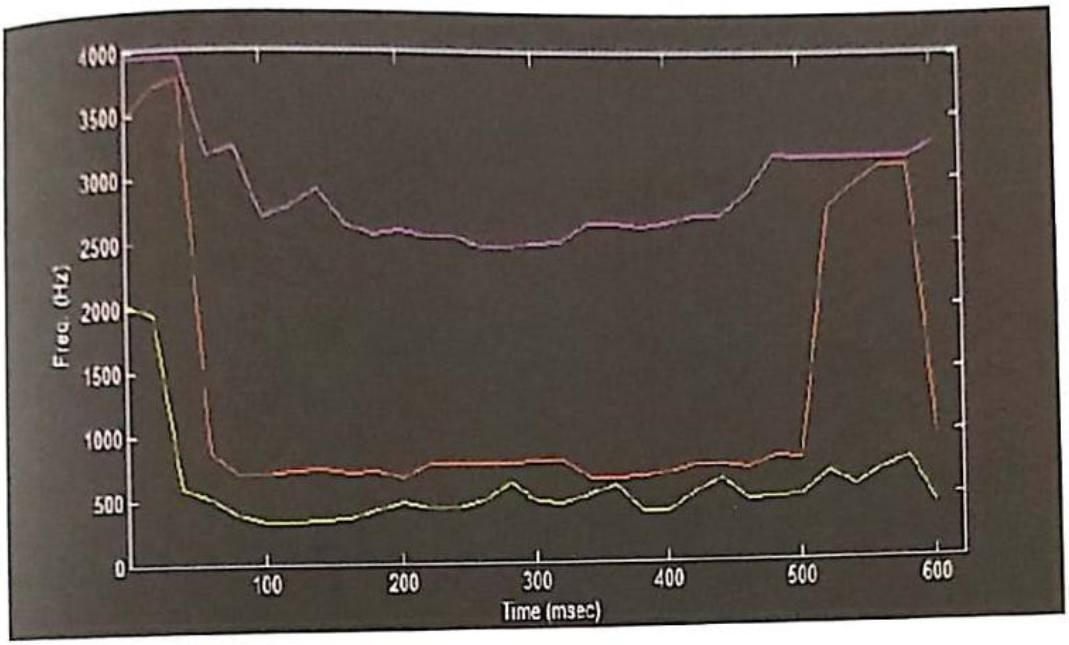


Figure (13.17) : Confusion matrix generated for 25 sample utterances keeping the hidden neuron as 80 (5 speakers X 5 repetitions each).

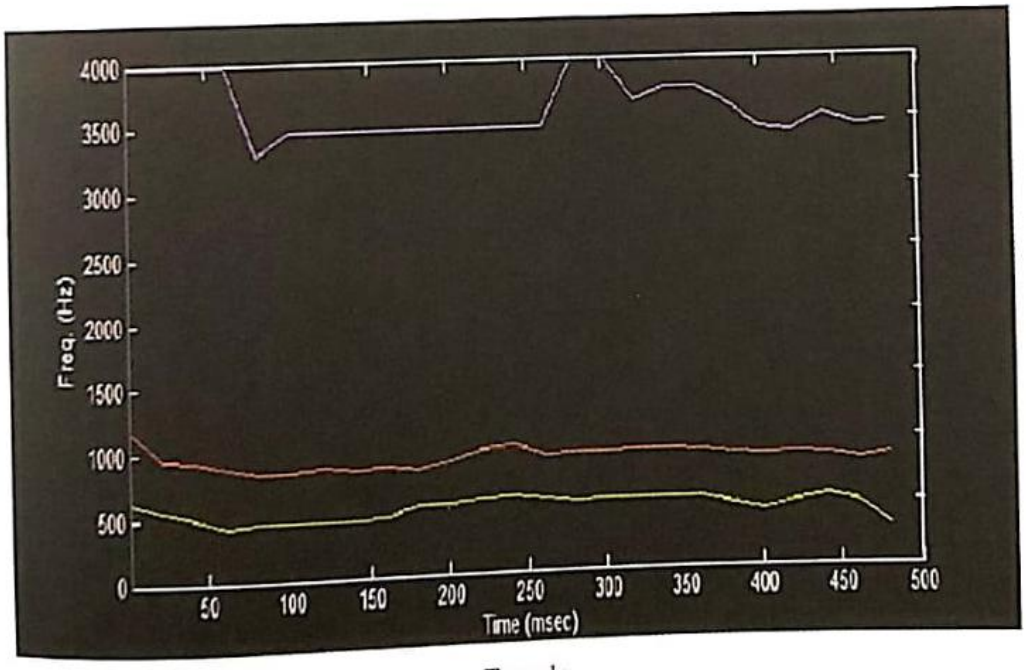
From the plots and figures, it is observed that the training set has reached the error tolerance (stopping criterion). The **training set** meets the specified goal, whereas, the **validation** and **train set falls** a little behind. The mean square error of the training data set was comparatively good, while the test and validation errors were higher. This could be overcome by increasing the training samples to the network. 50 (fifty) speech samples are used in the training phase.

The testing is done for each pair (i.e. cluster size and number of hidden neurons) in the resultant matrix.Finally we feed 10 speaker data to our ANN for classification for the selected Bodo word set, which is uttered 5 times individually by all of them.

Represents F_3 Represents F_2 Represents F_1



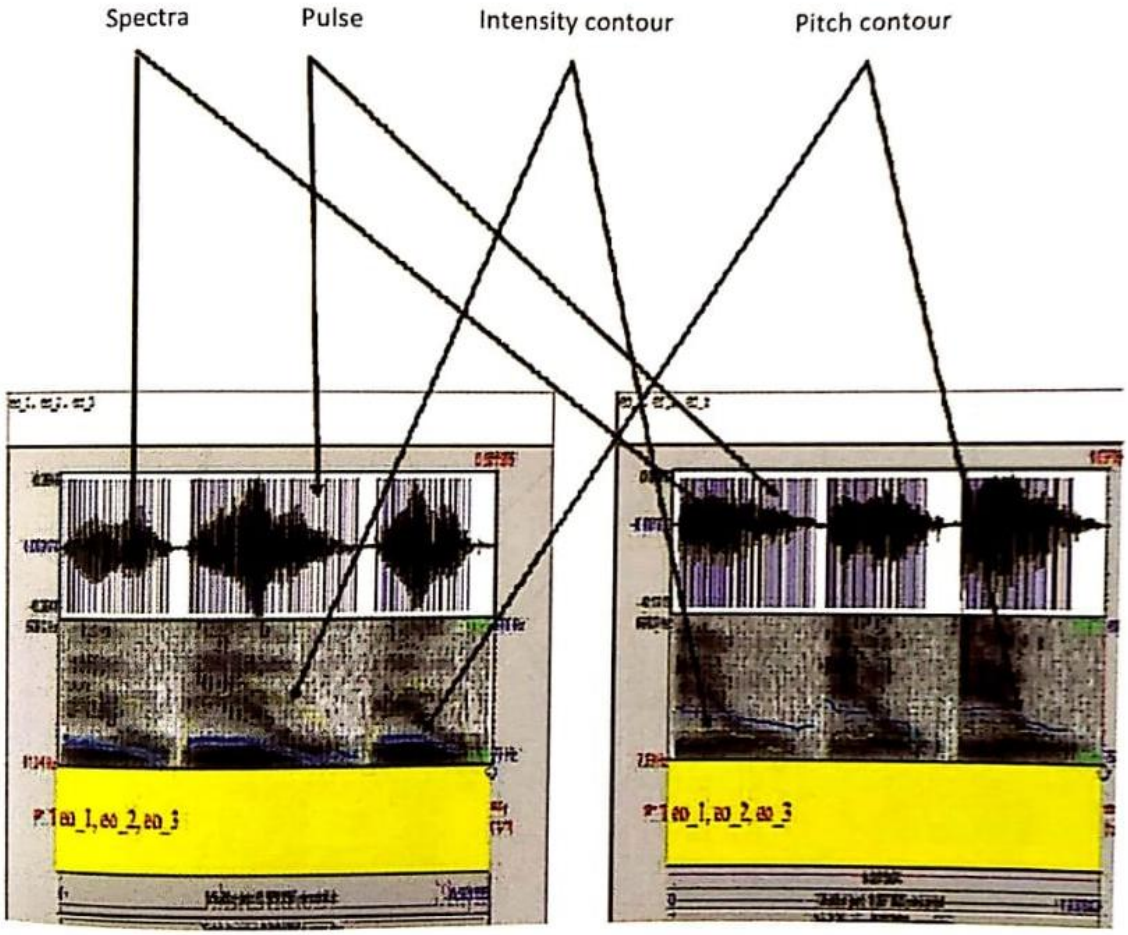
Male



Female

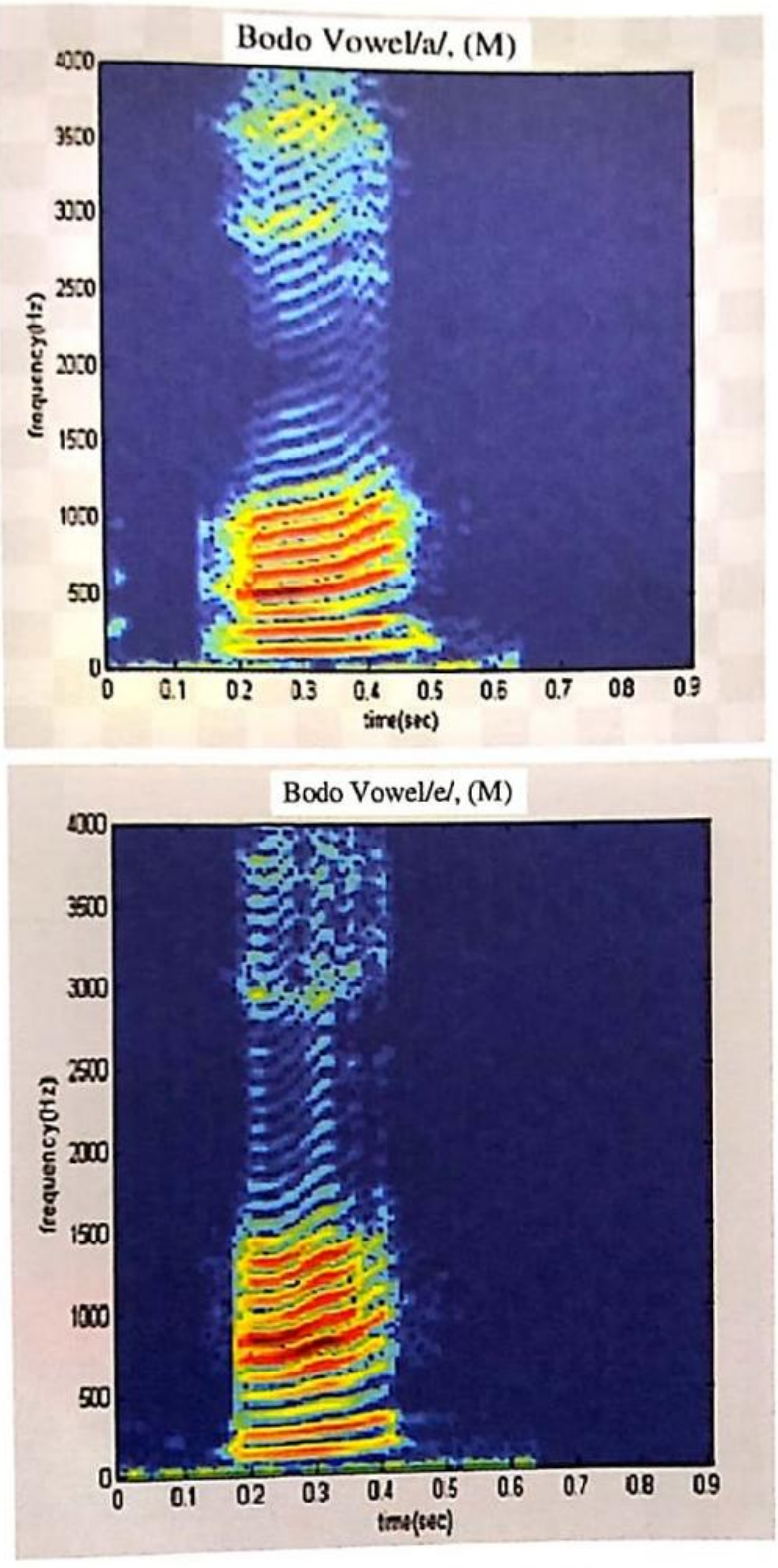
Formant Frequencies of Bodo vowels /o/ for (Male) and (Female)

13. eo[1](to cleare by cutting):
    eo[2] (to plough):
    eo[3] (to fry):



(a) Male (b) Female

Pitch contour, Intensity contour and Spectra of eo[1], eo[2], eo[3] for male and Female



Spectrograms of Bodo Vowels (Male)

airtel
বড়ো ভাষাত আন্তর্জাতিক পর্যায়লৈ নিয়াৰ পদক্ষেপ
NEWS LIVE
বড়ো সাহিত্য সভাৰ অধিৱেশনত প্ৰকল্প উন্মোচন
বড়ো ভাষা প্ৰসাৰণৰ পদক্ষেপ
ই-থুনলাই প্ৰকল্প
COMING UP
PRIME TIME
ঢোল বজাই চৰকাৰক জগোৱাৰ চেষ্টা প্ৰতিবাদকাৰীৰ
05:53
ৰাজতিলক থিয়েটাৰ
এক আৱেগবিহ্বল সময়ান, অপত্যানুগতিক কাহিনীৰে
চকুপানীৰ পুতলা

অসমৰ @5
ASCOSYSৰ সৈতে হোৱা এই চুক্তিয়ে প্ৰসাৰ
DY365
COMING UP NEXT
NO.1 RED BRICKS
গাঠিৰ বিষৰ শ্ৰেষ্ঠ ঔষধ
Dr. Ortho
Ayurvedic Oil & Capsules

বড়ো সাহিত্য সভা - এছ'ছিন আজত বুজাবুজিন চুক্তি

ই-থুনলাই'ৰ জৰিয়তে বিশ্ব দৰবাৰলৈ যাব বড়ো ভাষা

बोड़ो भाषा के संरक्षण व विस्तार की पहल

एस्कोसिस व बोड़ो साहित्य सभा में करार

गुवाहाटी, 6 जनवरी (ख.सं.)। बोड़ो भाषा-साहित्य-संस्कृति-परंपरा के संरक्षण के लिए बोड़ो साहित्य सभा ने आज एस्कोसिस के साथ एक सहमति पत्र पर हस्ताक्षर किया। इस अवसर पर बोड़ो साहित्य सभा के महासचिव प्रशांत बोड़ो ने कहा कि विश्व की सात हजार भाषाओं में से आधी लुप्त होने के कगार पर है। सामाजिक अथवा आर्थिक शक्ति के प्रभाव से जब वक्ता कोई एक भाषा के बदले दूसरी भाषा का इस्तेमाल अधिक करने लगे तभी संबंधित भाषा के लुप्त होने की ज्यादा संभावना होती है। पिछले सौ सालों में चार सौ से अधिक भाषाएं लुप्त हो चुकी हैं। प्रत्येक तीन महीने के बाद एक और 50 से 90 प्रतिशत भाषाएं आने वाली शताब्दी में खत्म हो जाएंगी। अर्थात दो-दो हफ्ते में एक भाषा खत्म होगी। अनेक अनुसंधानकर्ताओं का कहना है कि शेष पृष्ठ 11 पर