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**MINISTRY OF GENERAL EDUCATION**

**MUCHINGA PROVINCE**

**JUNIOR ENGINEERS TECHNICIANS & SCIENTISTS (JETS)**

**REPORT ON PROVINCIAL JETS FAIR HELD AT MPIKA BOYS SECONDARY SCHOOL FROM 27TH TO 28TH JUNE, 2016**

1. **Introduction**

This report covers in full the events that characterized the 2016 JETS fair in Muchinga province held at Mpika Boys Secondary School. It includes persons of distinguished honour who dignified the occasions and made it a success. The hosting school and the Districts teams that took part in this event are also talked about in this report. In its final analysis, the report gives an aggregate of the results in all categories. It ends with the mention and crowning of the overall wining district.

* 1. **JETS PROVINCIAL TEAM**

1. PESO (Muchinga Province) – Guest of honor
2. Mr. Kaira – SESO ( Mathematics)
3. Mr. Chitomombo SESO (Practical Subjects)
4. Mr. Simuchile SESO (Science)
5. Mr. Tesho,
6. Miss. Kaluba, G Regional Organizer
7. Mr. Mwape. E – (Jets Secretary Provincial)
8. Mr. Chalwe. (Committee Member)
9. Mrs…………………….(Matron)
   1. **PREPARATIONS & PARTICIPATION**

The 2016 Provincial JETS fair in Muchinga Province kicked off on Monday the 27th of June, 2016 after a key note speech by the Guest of honor the PESO – Muchinga province. In his speech, the Guest of honor encouraged participants to be creative and Ingenious when coming up with projects. He discouraged the habit of recycling the same projects year-in year-out for the sake of participating in the fair. He wished that one day there could be some home grown Engineers in Zambia capable of making indigenous vehicles with Zambian names like Nkwazi.

Six Districts brought their carefully selected teams to represent them in various categories. The mood of the day was characterized by excitement and joyousness by all participants.

After the official opening by the Guest of honor, a coordination meeting involving all districts representatives was called around 11:00hrs by the SESO (science) Mr. Simuchule. District Patrons and matrons were given different tasks to accomplish in order to make the fair a success. The quiz master and three judges were appointed after a moment of serious discussion and consideration. At the same time a team of adjudicators was assembled and assigned categories were to conduct their adjudication based on their specialization.

Because of the aspect of time, a consensus resolutions was reached to conduct all categories concurrently. That is to say while quiz war going on adjudication of projects was also happening. In Quiz the categories competed for were Primary Quiz, Junior Quiz and Senior Quiz while in Olympiads there were Primary Olympiads (Mathematics and Science), Junior Olympiads (Mathematics and Science) as well as Senor Olympiads( Mathematics, Physics, Biology and Chemistry).

Additionally, there were team who presented their Projects for both Junior and Senior. The table below shows the categories of projects that were displayed by participant.

**PRIMARY PROJECTS RESULTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **PRIMARY PROJECTS** |  |  |  |
| **DISTRICT** | **SCIENCE** | **MATHS** | **TOTALS** |
| MPIKA | 0 | 0 | 0 |
| SHIWA | 0 | 5 | 5 |
| CHINSALI | 0 | 0 | 0 |
| ISOKA | 6 | 6 | 12 |
| NAKONDE | 0 | 0 | 0 |
| MAFINGA | 5 | 0 | 5 |

**PRIMARY QUIZE - SCIENCE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| **DISTRICT** | **ROUND 1** | **ROUND 2** | **ROUND 3** | **TOTAL** |
| MPIKA | - | - | - | - |
| SHIWA | 0 | 0 | 0 | 0 |
| CHINSALI | 0 | 0 | 0 | 0 |
| ISOKA | 2 | 0 | 0 | 2 |
| NAKONDE | 0 | 0 | 0 | 0 |
| MAFINGA | 0 | 0 | 0 | 0 |

**PRIMARY QUIZ - MATHEMATICS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| **DISTRICT** | **ROUND 1** | **ROUND 2** | **ROUND 3** | **TOTAL** |
| MPIKA | - | - | - | - |
| SHIWA | 0 | 0 |  | 0 |
| CHINSALI | 0 | 0 |  | 0 |
| ISOKA | 2 | 0 |  | 2 |
| NAKONDE | 0 | 0 |  | 0 |
| MAFINGA | 0 | 0 |  | 0 |

**PRIMARY OLYMPIADS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **SCIENCE** | **MATHS** | **TOTAL** |
| **DISTRICT** |  |  |  |
| MPIKA | 4 | 1 | 5 |
| SHIWA | 3 | 0 | 3 |
| CHINSALI | 5 | 2 | 7 |
| ISOKA | 6 | 5 | 11 |
| NAKONDE | 1 | 0 | 1 |
| MAFINGA | 2 | 0 | 2 |

**JUNIOR MATHEMATIC OLYMPIADS**

|  |  |  |
| --- | --- | --- |
| **DISTRICT** | **NAME** | **POINTS** |
| MPIKA | WILLARD KAIMA | 3 |
| SHIWA | MUNYANDI DESMOND | 1 |
| CHINSALI | KATONGO FREDRICK | 4 |
| ISOKA | EMMANUEL MSISIKA | 5 |
| NAKONDE | KENNETH NKOSA | 6 |
| MAFINGA | SIMOVWE PATRICK | 2 |

**JUNIOR SCIENCE OLYMPIADS**

|  |  |
| --- | --- |
|  |  |
| DISTRICT | POINTS |
| MPIKA | 0 |
| SHIWA | 2 |
| CHINSALI | 6 |
| ISOKA | 4 |
| NAKONDE | 5 |
| MAFINGA | 3 |

**JUNIOR QUIZ SCIENCE**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **ROUND 1** | **ROUND 2** | **ROUND3** | **ROUND 4** | **ROUND 5** | **TOTAL** |
| MPIKA | 0 | 0 | 0 |  |  | 0 |
| SHIWA | 2 | 0 | 0 |  |  | 2 |
| CHINSALI | 2 | 2 | 0 |  |  | 4 |
| ISOKA | 2 | 2 | 2 |  |  | 6 |
| NAKONDE | 2 | 0 | 2 |  |  | 4 |
| MAFINGA | 0 | 0 | 0 |  |  | 0 |

**JUNIOR QUIZ MATHS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **ROUND 1** | **ROUND 2** | **ROUND3** | **ROUND 4** | **ROUND 5** | **TOTAL** |
| MPIKA | 0 | 0 | 2 |  |  | 2 |
| SHIWA | 2 | 0 | 0 |  |  | 2 |
| CHINSALI | 2 | 2 | 0 | 0 |  | 4 |
| ISOKA | 2 | 2 | 2 |  |  | 6 |
| NAKONDE | 2 |  | 2 | 2 |  | 6 |
| MAFINGA | 0 | 0 | 0 |  |  | 0 |

**JUNIOR PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **MATHS** | **PHYSICS** | **CHEMISTRY** | **BIOLOGY** | **ENTEMOLOGY** | **AGRIC** | **TOTAL** |
| MPIKA | 6 | 0 | 2 | 6 | 6 | 6 | 26 |
| SHIWA | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| CHINSALI | 5 | 0 | 6 | 0 | 3 | 3 | 17 |
| ISOKA | 3 | 0 | 3 | 0 | 2 | 5 | 13 |
| NAKONDE | 0 | 0 | 5 | 0 | 5 | 0 | 10 |
| MAFINGA | 4 | 0 | 1 | 0 | 4 | 4 | 13 |

**SENIOR PROJECTS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **MATHS** | **PHYSICS** | **CHEMISTRY** | **BIOLOGY** | **ENTEMOLOGY** | **ENVIROMENT** | **AGRIC** | **TOTAL** |
| MPIKA | 5 | 5 | 2 | 6 | 6 | 0 | 0 | 20 |
| SHIWA | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CHINSALI | 0 | 3 | 1 | 0 | 3 | 5 | 5 | 17 |
| ISOKA | 3 | 6 | 5 | 5 | 2 | 6 | 6 | 33 |
| NAKONDE | 0 | 0 | 3 | 4 | 5 | 0 | 0 | 12 |
| MAFINGA | 4 | 0 | 4 | 0 | 4 | 0 | 3 | 15 |

**SENIOR QUIZ MATHEMATICS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DISTRICT |  | ROUND 1 | ROUND 2 | ROUND3 | TOTAL |
| MPIKA |  | 0 | 2 | 2 | 4 |
| SHIWA |  | 0 | 0 | 0 | 0 |
| CHINSALI |  | 2 | 0 | 2 | 4 |
| ISOKA |  | 2 | 2 | 2 | 6 |
| NAKONDE |  | 0 | 0 | 0 | 0 |
| MAFINGA |  | 0 | 2 | 0 | 2 |

**SENIOR QUIZ CHEMISTRY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DISTRICT | ROUND 1 | ROUND 2 | ROUND3 | TOTAL |
| MPIKA | 2 | 2 | 2 | 6 |
| SHIWA | 0 | 0 | 0 | 0 |
| CHINSALI | 2 | 0 | 2 | 4 |
| ISOKA | 2 | 2 | 2 | 6 |
| NAKONDE | 2 | 0 | 2 | 4 |
| MAFINGA | 2 | 2 | 2 | 6 |

**SENIOR QUIZ PHYSICS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DISTRICT |  | ROUND 1 | ROUND 2 | ROUND3 | TOTAL |
| MPIKA |  | 2 | 2 | 2 | 6 |
| SHIWA |  | 0 | 0 | 0 | 0 |
| CHINSALI |  | 0 | 0 | 0 | 0 |
| ISOKA |  | 2 | 0 | 2 | 4 |
| NAKONDE |  | 0 | 0 | 0 | 0 |
| MAFINGA |  | 0 | 0 | 0 | 0 |

**SENIOR QUIZ BIOLOGY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DISTRICT | ROUND 1 | ROUND 2 | ROUND 3 | TOTAL |
| MPIKA | 2 | 0 | 2 | 4 |
| SHIWA | 0 | 0 | 0 | 0 |
| CHINSALI | 0 | 0 | 0 | 0 |
| ISOKA | 2 | 2 | 2 | 6 |
| NAKONDE | 0 | 0 | 0 | 0 |
| MAFINGA | 0 | 0 | 0 | 0 |

**OPEN CATEGORY**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **INNOVATIONS** | **ENERGY** | **EXHIBITS** | **V.DEVELOPMENT** | **SCH. APPARATUS** | **P PRESENTATION** | **ENTRAPRENEURSHIP** | **ICT** | **TOTAL** |
| MPIKA | 5 | 5 | 0 | 6 | 4 | 6 | 1 | 6 | 33 |
| SHIWA | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 3 | 9 |
| CHINSALI | 6 | 4 | 5 | 0 | 2 | 5 | 0 | 4 | 26 |
| ISOKA | 3 | 6 | 4 | 0 | 6 | 4 | 4 | 5 | 32 |
| NAKONDE | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 0 | 11 |
| MAFINGA | 4 | 0 | 3 | 5 | 3 | 0 | 3 | 0 | 18 |

**SENIOR MATHEMATICS OLYMPIADS**

|  |  |  |
| --- | --- | --- |
|  | | |
| DISTRICT | POINTS |
| CHINSALI | 2 |
| ISOKA | 6 |
| MAFINGA | 5 |
| MPIKA | 3 |
| NAKONDE | 4 |
| SHIWA | 1 |

**SENIOR BIOLOGY OLYMPIADS**

|  |  |
| --- | --- |
|  | |
| DISTRICT | POINTS | |
| CHINSALI | 3 | |
| ISOKA | 6 | |
| MAFINGA | 2 | |
| MPIKA | 5 | |
| NAKONDE | 4 | |
| SHIWA | 1 | |

**SENIOR PHYSICS OLYMPIADS**

|  |  |
| --- | --- |
| **DISTRICT** | **POINTS** |
| CHINSALI | 3 |
| ISOKA | 4 |
| MAFINGA | 2 |
| MPIKA | 5 |
| NAKONDE | 6 |
| SHIWA | 1 | |

**SENIOR CHEMISTRY OLYMPIADS**

|  |  |
| --- | --- |
| DISTRICT | POINTS |
| CHINSALI | 3 |
| ISOKA | 6 |
| MAFINGA | 2 |
| MPIKA | 5 |
| NAKONDE | 4 |
| SHIWA | 1 |

**SUMMARY TOTAL BY DISTRICT**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | |  | JUNIOR | |  | SENIOR | |
| DISTRIC | TOTAL |  | DISTRIC | TOTAL |  | DISTRIC | TOTAL |
| MPIKA | 5 |  | MPIKA | 31 |  | MPIKA | 39 |
| SHIWA | 8 |  | SHIWA | 10 |  | SHIWA | 6 |
| CHINSALI | 7 |  | CHINSALI | 31 |  | CHINSALI | 22 |
| ISOKA | 27 |  | ISOKA | 34 |  | ISOKA | 49 |
| NAKONDE | 1 |  | NAKONDE | 31 |  | NAKONDE | 16 |
| MAFINGA | 7 |  | MAFINGA | 16 |  | MAFINGA | 23 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| OPEN | |  | SENIOR OLYMPIADS | |
| DISTRIC | TOTAL |  | DISTRICT | TOTAL |
| MPIKA | 33 |  | MPIKA | 18 |
| SHIWA | 9 |  | SHIWA | 4 |
| CHINSALI | 26 |  | CHINSALI | 11 |
| ISOKA | 32 |  | ISOKA | 22 |
| NAKONDE | 11 |  | NAKONDE | 18 |
| MAFINGA | 18 |  | MAFINGA | 11 |

1. **Announcement of winning districts**

Around 17:00hrs on the second day of the fair, results were made available and it was time for the pupils to assemble in the hall to receive awards and certificates. The table below summarizes the winner the categories in which they were awarded certificates and prizes.

**GRAND TOTAL**

|  |  |
| --- | --- |
| **DISTRICT** | **POSITION** |
|  |  |
| **MPIKA** | **2** |
| **SHIWA** | **6** |
| **CHINSALI** | **3** |
| **ISOKA** | **1** |
| **NAKONDE** | **4** |
| **MAFINGA** | **5** |

1. **SUCCESSES**

Though there was inertia at the beginning of the event as organizers moved up and down putting logistics together, the fair ended on a very hectic pace and anxiety to hear the winner. Numerous successes were recorded at this year’s JETS fair. Firstly, to bring six districts in one place without major incidents can only be attributed to good planning and coordination. Secondly, there were outstanding projects that drew the attention of some engineers in the province. One of these projects was on a ‘self-sustaining electric power system’ and an automatic irrigation system.

1. **CHALLENGES ENCOUNTERED**

Arrival dates and time was not followed by participating Districts. Many of the District patrons arrived on the actual day of the fair instead of arriving on the previous day (Sunday 26th,June). This lead to a lot of time wastage organizing materials, Pupils and preparing rooms for Projects as well as organizing a coordination meeting to share responsibilities among ourselves.

Secondly, conducting the JETS fair concurrently meant depriving pupils the change to learn from their friends in the categories as everything was done at once. Adjudicating, Marking and compilation of results for all categories was done on the second day. This was very tedious work for the organizers and the secretariat. Again this can be attributed partly to limited days and time given for accomplishing the task and partly to not doing certain activities beforehand.

1. **RECOMMENDATION**

District teams should send lists of their participants in advance in soft copy to avoid wasting time typing their names.

1. **DEPARTURE**

At around 18:30 HRS, after announcing Mpika as the winning districts, it was time for all participants to depart to their respective districts. As the Provincial team was about to leave for Chinsali, news came that there was an incident involving Isoka and Mpika boys secondary school. The matter was followed up and it came to light that the bus for Isoka team had its back windscreen smashed by some disgruntled boys as it was leaving the premises. Two pupils were slightly injured. The matter was reported to the nearest police station and immediately the investigation into the cause began. At about 21:00HRS the Provincial team left for Chinsali.

Mwape Emmanuel Kaluba, Gladies

**JETS Secretary Regional Organizer**

**(Muchinga Province) (Muchinga Province)**